

Food and Cookery

ANDERSON



THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES

564
3 50

Food and Cookery

THEIR RELATION TO HEALTH

**A Handbook for Teachers and Pupils for
Use in Cooking Classes and
Demonstrations**

Revised Edition

By H. S. ANDERSON

**Instructor in cooking in the Training School for Nurses
Loma Linda, California**

Loma Linda, Cal.

The College Press

1911

Copyright 1911 by the College Press
Loma Linda, Cal.

PREFACE

The author of the present work, having been for several years employed as cook in many of the leading hotels and clubs of some of the largest cities of the Middle West and the Pacific Coast, as well as being for the past five years connected with the Loma Linda Sanitarium, is well prepared to speak of the subject here discussed. His position as experimental cook and teacher of cooking in the Nurses' Training School has also shown the importance of getting out something that may serve as a guide to teachers in presenting this subject before classes. Hence the present work is largely designed to serve as a manual for those who may be called upon to teach the subject in sanitariums and other educational institutions; and with this idea in view, a complete list of twelve lessons, so arranged as to cover in an outline way all the more important points of the subject, constitute a valuable feature of the book.

The First Edition having been all sold in less than a year, and the many warm commendations received for it, have encouraged the publishers to issue this thoroughly revised and enlarged edition, with the hope that it may be of assistance to those who are struggling to bring the teaching of this subject in our sanitariums and elsewhere into full accord with sound principles.

THE PUBLISHERS.

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

1911

CONTENTS

INTRODUCTION	. . . . .	Page 9
	Foods, their Uses in the Body	
	Food Economy	
	Suggestive Course of Lessons	
	Preparation of Food	
	Essentials to Success	
BREAD	. . . . .	24
	UNFERMENTED BATTER BREADS	25
	Whole Wheat Puffs	
	Corn Bread 1	
	Corn Bread 2	
	Hoe Cake	
	Hot Cakes	
	UNFERMENTED DOUGH BREADS	28
	Cream Rolls	
	Whole Wheat Sticks	
	Fruit Crisps 1	
	Fruit Crisps 2	
	German Sticks	
	Cocoanut Crisps	
	Walnut Sticks	
	FERMENTED BREADS, YEASTS	30
	White Bread	
	Whole Wheat Bread	
	Graham Bread	
	Rye Bread	
	Fruit Bread, Buns, Rolls	
	Graham Buns	
SOUPS	. . . . .	38
	Cream of Tomato	
	Cream of Corn	
	Cream of Green Peas	
	Cream of Potato	
	Cream of Lettuce	
	Julienne	
	Potage St. Germain	
	Fruit Soup	
GRAINS, NUT FOODS, ENTREES	. . . . .	41
LEGUMES	. . . . .	42
	Stewed Lima Beans	
	Lima Bean Puree	
	Red Beans Creole	

Savory Lentils and Rice	
Lentil and Rice Patties	
Legume Cutlets	
Croquettes of Scotch Peas	
Baked Corn Nut Pie	
Cream Noodles	
Spanish Rice	
Nut Cero Stew with Dumplings	
New England Stew	
Protose and Rice Timbales	
Baked Macaroni and Olives	
Macaroni au Gratin	
Macaroni and Rice Croquettes	
Baked Spaghitti	
Nut Roast	
Baked Dressing	
Steamed Rice	
Browned Rice	
GRAVIES, SAUCES	50
Brown Sauce 1	
Brown Sauce 2	
Brazil Nut Sauce	
Cream Sauce	
Celery Sauce	
Nut Sauce	
Tomato Sauce	
VEGETABLES	52
New Peas	
Baked Ear Corn	
String Beans	
New Asparagus	
Asparagus Tips and New Peas	
Stewed Tomato	
Scalloped Tomato	
Summer Squash	
Baked Squash	
Breaded Egg Plant	
Stewed Salsify	
Cauliflower au Gratin	
Baked Cream Corn	
Roasted Potato	
Scalloped Potato	
Dauphine Potato	
SALADS AND DRESSINGS	57
VEGETABLE, LETTUCE, AND TOMATO	
Jellied Tomato	

Stuffed Beet Salad
 Salad Russe
 Potato Salad
 Celery Salad
 Cole Slaw
 Celery and Nuttolene Salad

DRESSINGS

Mayonnaise Dressing
 Boiled Dressing
 Cream Dressing

FRUIT SALAD 59

Stuffed Date Salad
 Fruit Basket
 Fruits and Nuts
 Fruit Mold
 Date and Apple

SAUCES

Fleurette Sauce
 Lemon Sauce

DESSERTS 61

Sago Fruit Mold
 Prune Pudding
 Strawberry Whip
 Strawberry Dessert
 Banana Loaf
 Banana Snow
 Flaked Rice and Fruit Mold
 Vegetable Gelatin
 Orange Jelly
 Berry Mold
 Jellied Apple

PIES 65

Pie Crust
 Apple Pie
 Prune Pie 1
 Prune Pie 2

PUDDINGS 66

Banana Tapioca Pudding
 Cream Tapioca Pudding
 Grape Blanc Mange
 Cream Rice Pudding

CAKES 67

Layer Cake 1
 Layer Cake 2

Walnut Loaf Cake	
ICINGS, FILLINGS	
White Icing 1	
White Icing 2	
White Icing 3	
Orange Filling	
TOASTS, BREAKFAST DISHES	70
Strawberry Toast	
Blackberry Toast	
Prune Toast	
Cream Peas on Toast	
Walnut Lentils on Toast	
Tomato Toast	
Scrambled Eggs with Tomato	
INVALID DIETARY	71
Barley Water	
Rice Water	
Oatmeal Gruel	
Cornmeal Gruel	
Gluten Gruel	
Flaxseed Tea	
Fruit Egg Nogg	
Cream Egg Nogg	
Lemonade	
Orangeade	
FRUIT ICES, ICE CREAM	74
ICES	
Strawberry	
Blackberry	
Apricot	
Pineapple	
Grape Fruit	
Lemon	
ICE CREAM	
CANNING, PRESERVING	76
Fruits	
Vegetables	
COMBINATIONS, MENU MAKING	79
SUGGESTIVE MENUS	83

FOOD AND COOKERY

Foods, Their Uses in the Body

“To care for the body, by providing for it food that is relishable and strengthening, is one of the first duties of the householder.” When men and women study how to supply the needs of the body intelligently, they place themselves on vantage ground. We all have in the beginning a certain vital force from which to draw. To know how to husband it properly is the most essential thing in preserving health.

By taking food into the body the system is nourished and built up. Disease results if this food is improper in quantity, or poor in quality, or if it is poorly prepared for assimilation. There is a constant breaking down of the tissues of the body; every thought of the mind, every movement of a muscle, involves waste, and this waste is repaired from our food. It is highly important, then, that everyone should be able to choose those foods which best supply the elements needed to make good blood, which in turn imparts life and strength, to nerve, muscle, and tissue.

Grains contain the food elements most evenly distributed. Wheat is considered a perfect food, and the representative of all foods, containing properties which so nearly represent the constituent parts of the body structure as to indicate a special Providence in providing it for the human race. Grains are very nutritious, and when cooked under a high degree of heat, as in baking, they are very easily digested and assimilated. When they are cooked by the process of boiling or steaming, they require several hours cooking in order to render them digestible.

In the olive, as in the various nuts, we find nature's storehouse of fats. These, when properly prepared, supply the place of animal oil and fats.

Fruits are used not so much with a view of supplying nutri-

ients as for other purposes; the organic acids and essential oils, with the easily digestible form in which the nutrients are present, are factors which give fruits a high value in the dietary. These acids and essential oils impart palatability to the food, and assist functionally in the digestive process.

Figs and prunes contain chemical compounds that are laxative in character.

In our study of the purposes which the various food elements serve in the vital economy, and of the foods best adapted to the accomplishment of these purposes, valuable help is given us in a practical knowledge of the composition of the various food materials, which enables us to arrive at an idea of the real value of the food in question. See *Plate I*.

In speaking of food, we understand something which is capable, upon being taken into the body, of either repairing its waste or of furnishing it with material from which to produce heat and muscular work. This brings to view the two main functions of food in the body. By the former function, food provides for the conservation of the material of the body; by the latter, conservation of bodily energy is maintained. Substances which are unable to help in the one or the other of these directions can not be called food. Examples of such non-foods are to be found in extractives of meat, tea, coffee, spices, etc. These have no nutritive value whatever.

All foods are made up of one or more of three distinct classes of organic compounds, known as proteid or albuminous substances, carbohydrates and fats, and different inorganic salts. These substances are spoken of as the "nutritive constituents" of food, and may be separated into four divisions:—

1. The *proteid* or nitrogenous substances are represented in the food by the casein in milk, the curd of the milk being very highly nitrogenous; the gluten of the wheat; the albumen in the white of egg, which is the purest form of proteid;

the legumen in peas and beans; and the myosin of lean meat.

2. The *carbohydrates* are represented by the starches and sugars in the various foods.

3. *Fats*, as olive oil, butter, the oil found in the olive, nuts, and to some extent in most articles of food.

4. The *inorganic substances*, as water and mineral matters.

The chief office of proteid matter is to provide for the growth and repair of the material of the body. The carbohydrates and fats furnish the fuel for the body. They yield the heat that keeps it warm and the energy that enables it to work. The mineral matters are required by the body for the building of the bones and the teeth.

The changes which food undergoes in the body are essentially changes due to oxidation. Latent heat is just as surely found in the food we use as in wood and coal. They are both waiting to be oxidized, that they may be converted into heat and energy.

The latent energy in different foods has been determined by their oxidation, outside the body, in the apparatus known as the bomb Calorimeter. "The amount of heat given off in the oxidation of a given quantity of any material is called its 'heat combustion,' and is taken as a measure of its latent and potential energy." Now the calorie is the unit measure or standard of heat production, and means the amount of heat necessary to raise the temperature of one kilogram of water 1° C., or about one pint of water 4° F. Careful observation by Atwater, Rubner, Chittenden, and others, has shown that the heat value of one gram of each of the three chief nutritive constituents of food when taken into the tissues is as follows:—

1^a gram of proteid yields 4 calories
1 " " carbohydrates yields 4 calories
1 " " fats yields 8.9 calories

Bulletin No. 142, U. S. Dept. of Agriculture.

a. 28.3 grams equals 1 ounce.

As the ounce is made the standard or unit in calculating weight, so the calorie is the standard of heat production. By the figures in the column at the right hand side of chart (*Plate I.*), are represented the total amount of calories or food units contained in one pound of each of the various foods under consideration. The building material—proteid—is represented by the red color, and the carbohydrates by the green, etc.

The vital part of all tissue is *proteid*. Without proteid the body would waste away, for the wear and tear of tissue must be made good. Though there is no article of diet, except sugar and pure fat, into which proteid matter does not enter to a greater or less degree, yet there are foods which contain an unusually high per cent of proteid, known as proteid foods. These are the peas, beans, lentils, nuts, eggs, and meat.

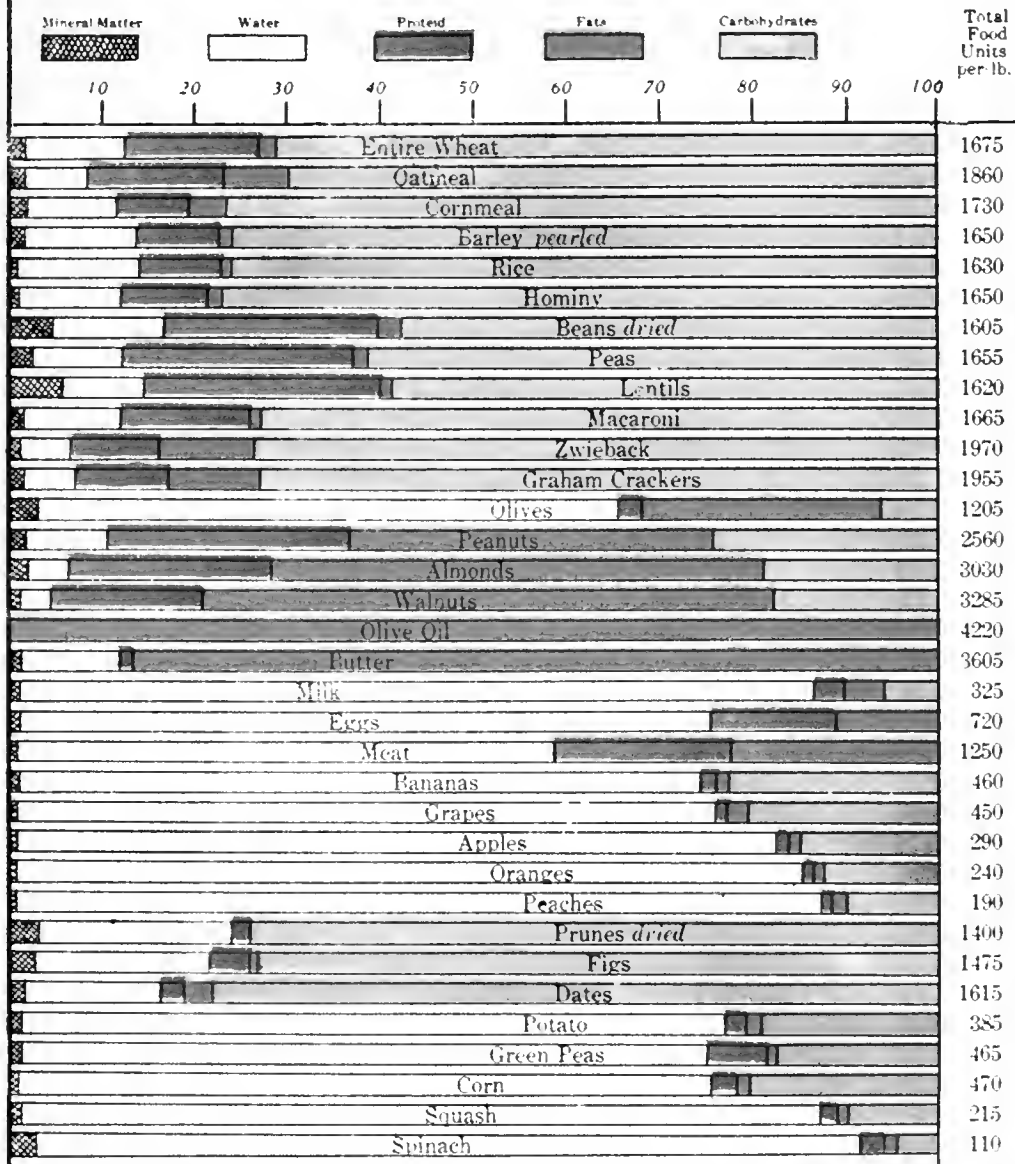
The fact that proteid matter is an essential element for the growth and repair of the body tissues, has a tendency to lead people to believe that they might be benefited by the consumption of large quantities of proteid foods; when the fact is, the body can use only a limited amount for the development and repair of tissues. Although proteid matter is capable of yielding a certain amount of heat on oxidation, it is inferior for this purpose to carbohydrates and fats; because, on being burned in the body, it yields certain deleterious products which throw upon the liver and kidneys an unnecessary amount of labor that overtaxes them and lays them liable to attacks of disease. Many of the ailments so prevalent to-day, as rheumatism, gout, gastro-intestinal disturbances, indigestion and liver troubles, have been found to be closely associated with the habitual overeating of proteid foods.

There is wisdom in a diet that shall provide an abundance of carbohydrates and fats, proteid being added only in sufficient amounts to meet the needs of the body for nitrogen and for the development of fresh muscle fibers, etc. Careful experiments have demonstrated that the body is best sus-

Food Values

Organic { Nitrogenous **PROTEID** Tissue-forming Substances
Non-nitrogenous { **CARBOHYDRATES**
FATS } Heat and Energy

Inorganic Salts - - Mineral Matters, Water



tained in health, and strength and endurance promoted, by a diet which contains a proportion of one ounce of proteid matter to from ten to twelve ounces of carbohydrates and fats.

A study of the composition of the various foods will enable us to see the wise provision made for man in the diet appointed for him in the beginning. Man in adding to his diet flesh meats with their exceedingly high per cent of proteid, besides other objectionable features connected with its use, finds himself grappling with a problem whose only solution is to be found in a study of cause and effect.

In the diet appointed in the beginning, man is guarded in this respect; as in nature, we find the various food elements better balanced to meet the needs of the body. The numerous exhaustive works of to-day, written on the subject of diet and the needs of the body, are designed to fill a long felt want. They are the response of thinking men to a world's great need. To meet this great need, God has sent us a message of health reform which comprehends man's complete restoration, physically and spiritually. A quotation from *Ministry of Healing*, gives a key to the divinely appointed plan: "In His written Word and in the great book of nature, He has revealed the principles of life. It is our work to obtain a knowledge of these principles, and by obedience to cooperate with Him in restoring health to the body as well as to the soul."—p. 115

The accompanying diagram, (*Fig. I.*) will help to bring before our minds the Bible picture of our original home, and of God's tender care over His erring children in giving them light and hope through all the different phases of their rebellion and apostasy; and it shows that He is actually leading them back step by step to Eden restored. He who created man and Who understands his needs, appointed Adam his food, as it is written, "Behold, I have given you every herb yielding seed, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for food."—*Gen. 1:29. A.*

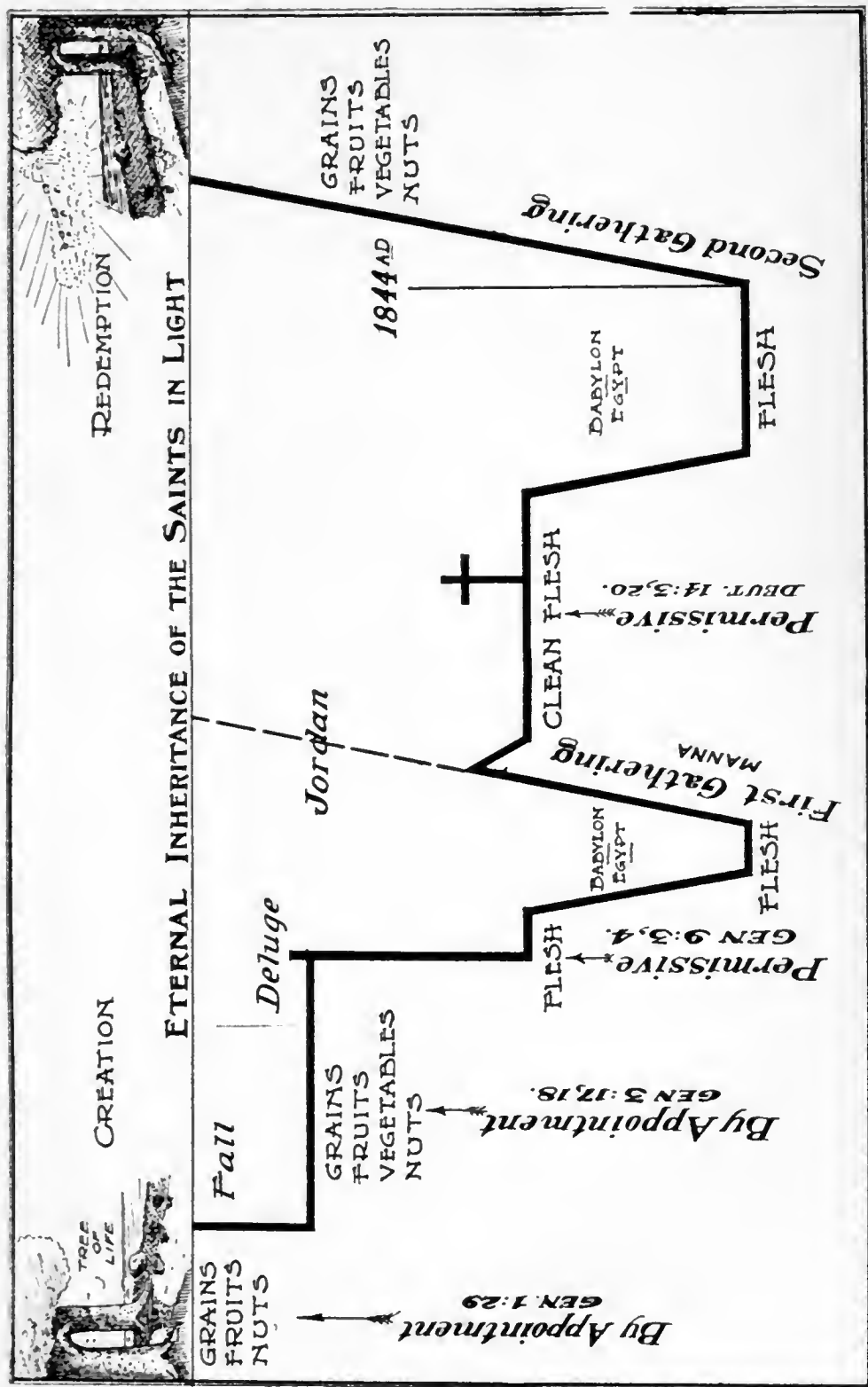


Fig. I.

R. V. After the fall, when the ground was cursed for man's sake, the herb of the field was added to his diet.

Then we are brought down to the time of the flood, when all vegetation was destroyed by water, God permitted man to eat flesh. Next we find the people of God down in the land of Egypt where they were in heavy bondage, after which the Lord brought them out with a strong hand and by an outstretched arm to make them the depositaries of His holy law, and through them it was designed that all the world should come to a knowledge of the true God. Their health was jealously guarded, and they were given a fleshless diet. God desired to make them His peculiar treasure above all people; but they cried for flesh, so He permitted them to eat clean flesh.

Then we come down to the end of the Jewish dispensation, at the time when the gospel was preached to the Gentiles, saying, "Ye are the temple of God." "There shall in no wise enter into it anything unclean."

In ancient time, a distinction between things clean and things unclean was made in all matters of diet. This was no arbitrary distinction, for the things prohibited were unwholesome, and the fact that they were pronounced unclean taught the lesson that the use of injurious foods is defiling.

To the chosen people of God, the laws relating to both physical and spiritual well being were made plain, and on condition of obedience He assured them: "The Lord will take away from thee all sickness."—*Deut. 7. 15* "And ye shall serve the Lord your God, and He shall bless thy bread and thy water; and I will take sickness away from the midst of thee."—*Ex. 23: 25*. These promises are for us to-day. The same principle which directed in giving these sanitary laws and regulations in times of old, and which has been the foundation in every true reform to the present time, is no less powerful to-day, and is summed up in these words: "Whether therefore ye eat, or drink, or whatsoever ye do,

do all to the glory of God.”—*1 Cor. 10: 31*. This principle, if heeded, will guide in all matters of diet and hygiene, as in every act of life. It will preserve us from intemperance in all its varied forms. “Every practice which destroys the physical, mental or spiritual energies, is sin. The laws of nature, as truly as the precepts of the decalogue, are divine; and only in obedience to them can health be recovered and preserved.”

There is great need to-day of that education that not merely teaches right methods in the treatment of the sick, but which encourages right habits of living, and spreads a knowledge of right principles. The desire of God for every human being is expressed in these words: “Beloved, I wish above all things that thou mayest prosper and be in health, even as thy soul prospereth.”—*3 John 2*. Every “Thou shalt not,” whether in physical or moral law, implies a promise. If we obey it, blessing will attend our steps, and we will know the meaning of the promise of God to His people which says, “I am the Lord that healeth thee.”—*Ex. 15: 26*.

Food Economy

“Economy is not saving, but wisely spending.”—Ruskin

When we have ascertained that a food is rich in nutritive constituents, and that it is of a nature to be easily digested in the stomach, we have still to find whether the nutriment it yields is obtained at a reasonable cost. When one realizes that the market price of a food is no indication of its real money value, the practical importance of such a test is more convincingly felt, because in the market one usually pays for flavor and rarity, not for nutritive qualities. To the working classes, who spend on an average fifty per cent of their wages for food supply, such knowledge is of special value. By a study of the chemical analysis of various foods bought for a particular sum, this test may be applied without difficulty. See *Fig. 2*.

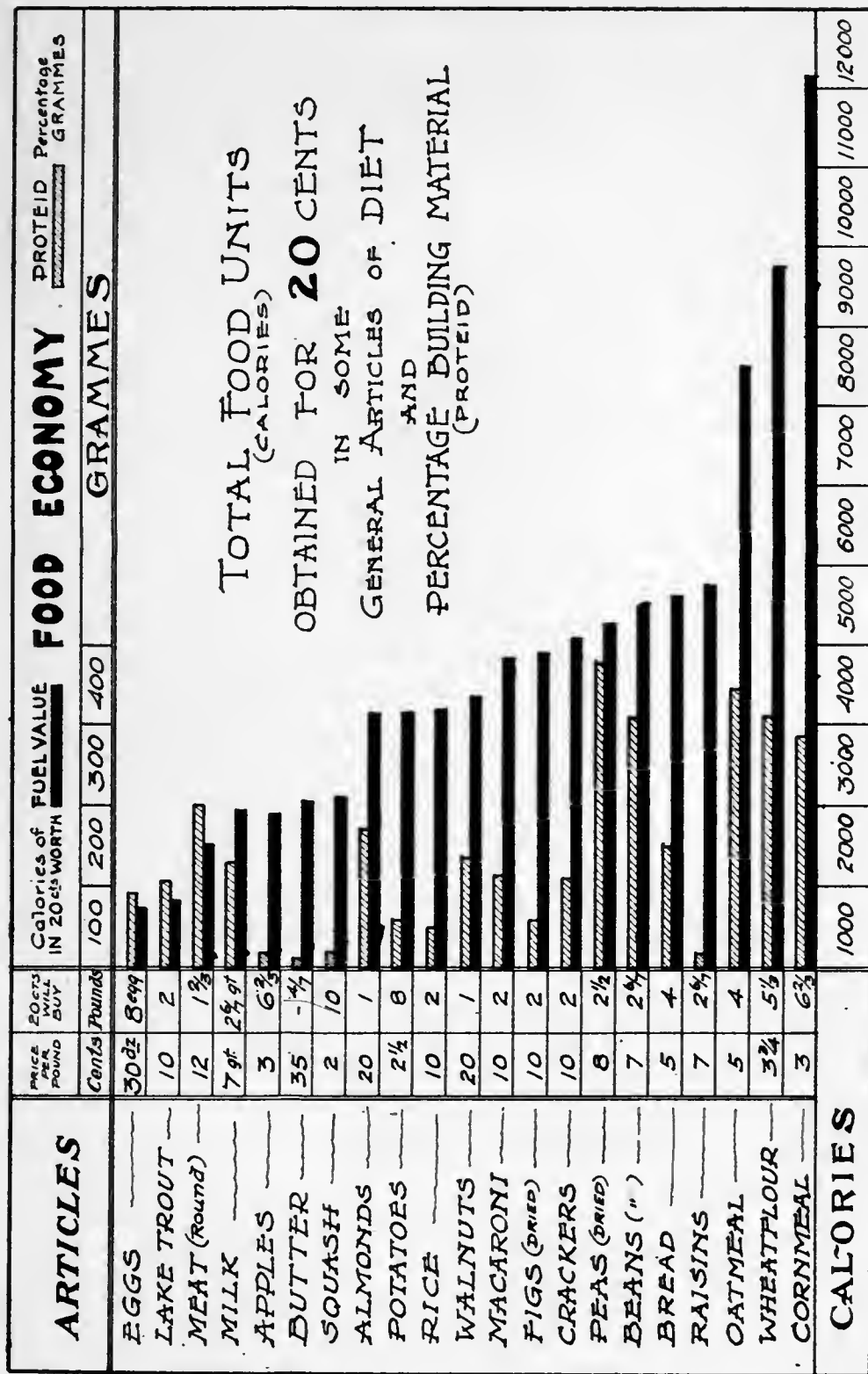


Fig. 2.

It will be seen that for energy (calories), grains lead the way, for instance,—nearly ten times as much nourishment can be obtained for twenty cents worth of wheat flour as for the same amount invested in trout or eggs; even more value is obtained for the same money when invested in cornmeal. In the matter of protied material, the legumes come first, while most of the grains contain proteid in a liberal proportion.

When the flesh of animals is used as food, there is great danger of excess of proteid material. Besides being of a stimulating character, it contains no carbohydrate to offset the large per cent of proteid. One advantage of using food of vegetable origin, is that in their growth vegetables secrete no poisons; whereas, in all animals the very process of life consists in the breaking down of tissues and the formation of various poisons. These poisons are in the flesh when the animal is killed, and no amount of cooking can remove them. Thus, by taking our food in the vegetable form, we avoid burdening the system with such a quantity of harmful substances, which must be eliminated from the system only at a great sacrifice to the vital organs. Many people seem to be under the impression that bodily strength and health are dependent upon the use of flesh meats. A quotation again from *Ministry of Healing*, throws much light on this question, and points out in a simple manner the advantages to be had in a simple and natural diet above that of a more complex nature.

“It is a mistake to suppose that muscular strength depends on the use of animal food. The needs of the system can be better supplied, and more vigorous health can be enjoyed, without its use. The grains, with fruits, nuts, and vegetables, contain all the nutritive properties necessary to make good blood. These elements are not so well or so fully supplied by a flesh diet. Had the use of flesh been essential to health and strength, animal food would have been included in the diet appointed man in the beginning.

“When the use of flesh food is discontinued, there is often

a sense of weakness, a lack of vigor. Many urge this as evidence that flesh food is essential; but it is because foods of this class are stimulating, because they fever the blood and excite the nerves, that they are so missed. Some will find it as difficult to leave off flesh-eating as it is for the drunkard to give up his dram; but they will be the better for the change.

“When flesh food is discarded, its place should be supplied with a variety of grains, nuts, vegetables, and fruits, that will be both nourishing and appetizing.”—*Ministry of Healing*.

It would seem that the use of flesh meats must be doubly objectionable now, since disease in animals is so rapidly increasing. Those who use flesh as food little know of what they are eating. Tuberculosis, cancer, and other fatal diseases are communicated by the use of contaminated meat. True reform always replaces an evil with something better. So, in the matter of diet, nature presents to us a field of boundless wealth, the Creator's choice for us, a plenteous store to choose from, and at prices within the reach of every creature. There is a rhyme that beautifully expresses this truth with its resultant tribute:—

“Eat life from Life's fresh growing garden,
Drink life from its myriad store,
Give life, and its flow
E'er increasing will go
Again to your open door.”

Health reform, as any other true reform, is a matter of education, and must be progressive; vital principles are involved in which are treasured up wisdom of the highest order for every seeker after health and truth. There has recently been formed throughout the United States a number of different societies for the purpose of studying the best means of providing for the table foods which do not harbor pestilence and disease, and for studying the development of the culinary art in the home in harmony with right principles. Thus it is plainly seen that the minds of thinking people are

being awakened to see the importance of exercising sound judgment and good common sense in the matter of the care and preservation of health.

The following course of lessons is in no way intended as a complete guide to hygienic cookery. Of the great variety of ways in which the grains, fruits, nuts, and vegetables may be prepared into dishes that are healthful and nourishing, only a few of the most practical can be taken up in this course. One of the main objects is to give some of the general principles essential to success in this work, followed by practical illustrations of methods used. For home and class work this course consists of a series of sixteen lessons, two lessons each week, each session occupying two hours. Eight pupils constitute a class, at which time practical work is done. Due recognition is given to the study of the nutritive value of foods, their digestibility, combinations, etc., also menu-making and the general principles involved in the making of the same.

This suggestive course of lessons, designed especially for demonstration and field work, may be modified by the instructor according to convenience to the occasion, or to the length of time given for class periods. A previous study of the recipes and instructions following will help to make the work very simple and easily understood when the hour comes for class.

Suggestive Course of Lessons

Lesson 1. Corn Bread, Baked Lima Bean Puree, Whole-wheat Sticks, Strawberry Whip.

Lesson 2. Juleinne Soup, Corn Nut Pie, Germea Sticks, Sago Fruit Mold.

Lesson 3. Cream of Tomato, Hoe Cake, Prune Pudding, Nut Cero and Potato Stew with Dumplings.

Lesson 4. Salads,—Lettuce and Tomato, Cold Slaw, Celery Salad, Stuffed Beet Salad, Jellied Tomato Salad, Potato Salad. Dressings,—Mayonnaise, Boiled Dressing, Cream Dressing.

Lesson 5. Noodles, Fruit Crisps, Cream of Potato Soup, Banana Loaf.

Lesson 6. Egg Nogg, Gruels, Strawberry Toast, Browned Rice, Cream Peas on Toast.

Lesson 7. Layer Cake, Frosting, Macaroni with Olives, Grape Blanc Mange.

Lesson 8. Vegetable Gelatin, Orange Jelley, Strawberry Jelley, Jelley Apple, Pie Making (Crust)—Apple, Prune.

Lesson 9. Fruit Salads, Stuffed Date Salad, Fruit Basket, Fruit and Nuts, Apple and Date, Fruit Mold.

Lesson 10. Legume Cutlets, Brazil Nut Sauce, Fruit Soup, Macaroni and Rice Croquettes.

Lesson 11. New England Stew, Nut Roast, Tomato Sauce, Cream of Green Peas, Walnut Sticks.

Lesson 12. Baked Dressing, Brown Sauce, Potage St. Germain, Lentil and Rice Patties, Cream Tapioca.

Preparation of Foods

The manner of preparing our food has much to do with our usefulness in this life, and with the building of our characters. The health of the family may be safeguarded by a careful, well-ordered diet, and this subject should appeal to every thinking mother. As a science, cooking is one of the most essential in practical life, and more than this it is one of the fine arts. Our aim should not be simply to arrange some concoction to appeal to a perverted appetite, without any consideration of its digestive qualities. Our cooks need education in making foods that nourish. Imperfect knowledge of cooking leads to diseases of every kind; and both children and adults suffer as a consequence.

The object sought in cooking is two-fold; first, to render the food more digestible; second, to develop its flavors, making it more palatable and inviting. No indifference should be manifested in the preparation of food. If the food eaten is not relished, the body will not be so well nourished. Food should be prepared in such a manner that it will be appetizing as well as nourishing. A glance at *Plate I.* will show us the foods which contain the highest per cent of nutritive value. Vegetables contain a small amount of nutriment. They are valuable, however, for their flavors and for the large quantity of organic fluid and mineral matter which they contain. Combined with grains and nuts, they furnish the needed bulk to the food. The grains make a highly nutritious food, and with nuts and fruit, make a perfect and ideal diet.

Essentials to Success

The pre-requisite to success in this work is similar to that in any other kind of work, viz., "*Plan, then work out your plan.*" Take the preparation of the first recipe given for whole wheat puffs, for an example.

The first step to be taken is to see that the fire is built in time, so the oven will be of the proper temperature when the

batter is ready. Use only heavy iron gem pans, which should be put in the oven to heat while the batter is in preparation. Have all the ingredients measured, and the needed utensils all at hand before starting to combine the articles for bread. This is very essential in all baking; especially so in making aerated breads, cakes, etc. Another point that needs to be emphasized is the need of *accurate measurments*. There are some simple things which an experienced cook can make without taking the trouble to measure, but how often we hear the remark made of "good luck" or "bad luck" with a recipe. Now there is no such thing as "luck," for the simple reason that every effect has its cause, and this is as true in cooking as in other kinds of work. If we have a good recipe and follow it exactly, using exact measurements, there is no reason why we should not get the same results each time.

The ordinary kitchen cup, holding one-half pint, with divisions indicating the half, third, and fourth parts of a cupful, is generally taken as the standard. Unless otherwise stated, a cup, tablespoon, or teaspoon of liquid or dry materials means a measure that is "*level full*." In dry measure this is best accomplished by filling the measure full and running the blade of a knife over the top with the edge outward to make it level. Care should be taken not to pack the ingredients; for this reason, weighing is always considered the safest, although not always as convenient as measuring.

It might be well to state here that there are many measuring cups on the market, sold as one-half pint cups, that hold quite a little more than that amount. Care should be exercised in getting a cup measure which holds one-fourth of a quart. If a larger one is used, allowance must be made.

When oil is called for in a recipe for shortening or for cooking, the refined cottonseed oil is generally used. Being tasteless and odorless, it can be used with good success where free fat is necessary. Dairy butter may be used in the place of these fats in most instances, using a little more of the butter than when the pure fat is used. There is, however,

great danger of disease through the use of butter. The percentage of tuberculous cattle in herds from which our public milk supply is derived, is astounding. As the cream rises to the surface of the milk, the tubercle bacilli lodged therein find access to our foods and to our tables through the use of butter. Milk when used should be thoroughly sterilized. This can be accomplished by putting the milk into a double boiler and heating it to a temperature of 160° F., and keeping it at that temperature for ten minutes, then setting the inner part of the boiler, with milk, into cold water to cool. By this method the milk is not chemically changed, as it is when boiled, and there is less danger of contracting disease through its use.

As a guide in measuring, the following table will be helpful, and may be followed with good results.

3 teaspoons equal	-	-	1 tablespoon
2 tablespoons of sugar or liquid	-	-	1 ounce
16 tablespoons	-	-	1 cup
4 cups	-	-	1 quart
4 cups sifted flour	-	-	1 pound
2 cups sugar, water, and most liquids	-	-	"

Bread

Bread is the most important article of diet, and deserves more attention than it receives. Considering the conveniences which exist everywhere, and the widespread knowledge of breadmaking, it seems unnecessary and wrong to find poor bread on the table. Home made bread requires care and attention; and then you have the real staff of life.

Breads may be divided into two classes: 1. Unfermented—made light by the introduction of air into the dough or batter; 2. Fermented—made light by a ferment, yeast being usually employed. Space will not permit at this time to speak of the ill effects on the system following the use of bi-carbonate of soda and baking powders in breadmaking; it may suffice to say that they are extremely harmful and unnecessary.

"Soda causes inflammation of the stomach, and often poisons the entire system." Air may be incorporated into a batter by beating. The use of eggs will aid in the process; because the white of egg, on account of its viscous nature, readily catches air and helps convey it into the batter. The following recipe for wholewheat puffs will help to illustrate these principles.

Unfermented Batter Breads

Wholewheat Puffs. While it has been quite customary in making this bread to allow one egg to each dozen puffs, with the addition of a little cream to the milk, it will be found that by using an average of one and one-half eggs to each dozen puffs, and omitting the cream, the expense in most cases is about the same as when the cream is used, and it makes the puffs very light and fine grained. The inexperienced find very little trouble in making nice light bread by this method.

1½ cups pastry flour, ⅓ cup wholewheat flour, 1½ cups milk, 1 teaspoon salt, 3 eggs separate.

Sift the white flour and salt into mixing bowl, add the wholewheat flour unsifted. Separate the eggs, add the milk and yolks to the flour, and stir until smooth with a wire batter whip. Beat the whites stiff and dry, pour the batter gradually into the beaten whites, folding it in by running a batter whip from the edge or side of the bowl down through the center and lifting it up so the batter will drop off into the bowl; repeat until it is thoroughly mixed, but do not stir. Remove the irons from the oven and set them on the edge of the stove; rub them with an oiled cloth or brush to prevent sticking. Pour the batter from a pitcher into the molds, filling them just barely full. Bake in a moderately hot oven twenty to thirty minutes.

A few dried currants or seedless raisins, washed and dried in a towel, may be sprinkled into each mold just before putting them into the oven, if desired.

Bran Puffs. $1\frac{1}{2}$ cups pastry flour, $\frac{3}{4}$ cup bran, $1\frac{1}{2}$ cups milk, 1 teaspoon salt, 3 eggs.

Make a batter of the flour, bran, salt, milk, and yolks, and finish the same as for wholewheat puffs.

Puffs may also be made by using one egg to two cups of milk, and enough strong bread flour to make a batter so thick that, when the batter whip is lifted out, the batter which flows from the whip will pile up slightly in the bowl instead of making a hole in the batter. Do not separate the egg. Mix the milk, egg, salt, and flour, and beat for a few minutes until it is perfectly smooth and free from lumps, then turn into hot oiled gem irons, and bake until nicely browned, about thirty minutes or more.

Corn Bread. The best cornmeal is that made from the Eastern corn, well matured, and not ground too fine. If otherwise, it has a tendency to be sticky when made into bread, and will not give good satisfaction.

No. 1. 1 cup cornmeal, 2 tablespoons flour, 1 tablespoon sugar, $1\frac{1}{4}$ teaspoons salt, $1\frac{1}{4}$ cups boiling water, 1 tablespoon cold water, 2 eggs separate.

Sift the meal, flour, salt, and sugar into mixing bowl. Put one and one-fourth cups water in a small saucepan on the fire, and as soon as it comes to a good boil, set it on the table and add the tablespoon cold water, and immediately pour most of the hot water on the cornmeal, reserving about one-fourth cup, stir smooth, and add as much of the one-fourth cup water remaining to make a batter that will pile well in the bowl but not be stiff. Beat the eggs separately, have the whites very stiff, then fold the yolks into the whites. Pour the cornmeal batter into the beaten eggs, fold it in with a batter whip, and with a large spoon remove from the bottom or sides any cornmeal adhering to it, mix it lightly yet thoroughly, then pour it into an oiled baking pan, having it about one inch or one and a half inches deep. Bake in a moderately hot oven about thirty minutes. The reason for

adding a little cold water before pouring the hot liquid on the cornmeal, is because in pouring boiling hot water on cornmeal it is very likely to scald it too much and form a paste. In this manner it will absorb too much water and can not be made dry and mealy. Thus the necessity of having the water boiling hot before adding the cold water so as to get the right temperature. The hotter the water, the more water the meal will take up. By taking this precaution, the process is quite simple, and it makes a fine grained light bread.

No. 2. 2 cups meal, $\frac{1}{4}$ cup flour, $2\frac{1}{2}$ cups boiling milk, 2 teaspoons salt, 2 tablespoons sugar, 3 eggs separately.

Sift the meal, flour, sugar, and salt into mixing bowl; heat the milk in a double boiler and pour most of the hot milk on the cornmeal. Stir smooth, add as much of the remaining milk to make a batter as for No. 1., beat eggs separately, fold yolks into whites, then pour on the corn batter and fold it into the eggs, and bake the same as in the above recipe.

Hoe Cake. No. 1. 1 cup cornmeal, 2 tablespoons flour, $1\frac{1}{4}$ cups milk; 1 tablespoon sugar, 1 teaspoon salt, 2 eggs separately.

Put the milk on the stove to heat in a double boiler. Sift the meal, flour, salt, and sugar together into a mixing bowl. As soon as the milk is boiling hot, pour one cupful of it on the cornmeal and stir smooth; add as much of the remaining one-fourth cup to make a batter that will not run, but that will pile up high in the bowl, it should not be stiff.

Beat the eggs separately, fold the yolks into the stiffly beaten whites, then pour on the scalded meal, folding it into the eggs with a batter whip, then from the side of a large spoon drop it onto an oiled baking sheet in oblong shapes and bake on the top grate in a hot oven until a nice brown.

By using one tablespoon oil, or its equivalent—one-fourth cup cream—only one egg need be used.

Hot Cakes. 1 cup coarse zwieback crumbs, $\frac{1}{2}$ cup flour, 1 teaspoon salt, $2\frac{1}{4}$ cups separated milk, 4 eggs.

Heat the milk to about 140° F., and pour it over the crumbs. Sift the flour and salt into a bowl, separate the eggs, and add enough milk to the yolks to take up the flour, making a thick smooth batter. Add this batter to the crumbs, mix well, beat the whites stiff and dry, fold the whole batter into the whites. Bake on an oiled soapstone griddle.

Unfermented Dough Breads

The earliest forms of bread were "unleavened breads." This term has been applied to hard breads, such as the "pass-over cakes" of the Israelites, and other breads in the form of thin cakes, sticks, etc. These hard breads are without doubt the most wholesome, because they encourage thorough mastication; being free from any chemical or ferment, they are very easily digested in the stomach. Care should be exercised in making this dough that the flour and water be mixed in just the right proportion. If the dough is too soft, the sticks or crackers will be very hard. A "cracker dough" must be a stiff dough, so that quite a good deal of pressure must be put on it in order to roll it out. All these breads should be baked in a medium oven, should be well done, but not browned very much. When they will break off crisp, they should be taken out of the oven.

Cream Rolls. $1\frac{3}{4}$ cups pastry flour, $\frac{1}{4}$ cup rich cream, $\frac{1}{4}$ cup cold water, $\frac{1}{2}$ teaspoon salt.

Sift the flour and salt together into a mixing bowl, add the water to the cream and mix well. Then pour the wetting on the flour all at once, and draw in the flour from the sides of the bowl through the center so as to get the moisture evenly distributed through the flour, but do not stir it into a batter in which some of the flour will be watersoaked and the rest hardly moistened. Work it into a dough for a few minutes on a slightly floured board. Roll it out to about one-third inch in thickness, and cut it into long strips about one-third

inch wide. Roll them on a board and cut them into two and one-half inch to three inch lengths. Lay them in a baking pan, leaving a little space between them, and bake in a medium oven until crisp and a light brown.

Wholewheat Sticks. 1 cup pastry flour, $\frac{1}{2}$ cup wholewheat flour, 1 tablespoon sugar, $1\frac{1}{2}$ tablespoons oil, $\frac{1}{3}$ cup cold water.

Sift the flour and salt into a bowl, add the oil and rub the flour between the hands to distribute the oil evenly; then add the water all at once and mix as for cream rolls; knead on a board for a minute, and roll out into one-third inch thickness. Cut it with a dull knife into long strips about one-third inch wide, then cut crosswise into sticks about three inches in length. Bake in a medium oven until just crisp and a very light brown in color.

Fruit Crisps No. 1. $1\frac{3}{4}$ cups pastry flour, 3 tablespoons sugar, $\frac{1}{2}$ teaspoon salt, $2\frac{1}{2}$ tablespoons oil, $\frac{1}{3}$ cup water, $\frac{2}{3}$ cup ground sultana raisins or figs.

Sift the flour and salt into mixing bowl; add the oil and rub it well into the flour; add the water all at once and mix as for whole wheat sticks. Roll it out into a long thin sheet as for pie crust. Have the raisins or figs previously washed and dried in a clean towel, put through a fine mill, lay on a well floured board and roll out in a thin sheet so as to cover half of the dough; recover with the other half and roll out quite thin so it will be pressed well together; cut it into squares, crescents or diamond shapes, prick them through with a fork, and bake in a very quick oven. Fruit sugars burn at a very low degree of heat, so the crisps should bake only until the crust is baked. If the fruit is allowed to cook it will harden.

Fruit Crisps No. 2. Use mixture for cream rolls. Roll out very thin and finish as for No. 1.

Walnut Sticks. $1\frac{1}{2}$ cups of pastry flour, $\frac{1}{2}$ cup wholewheat flour, $\frac{1}{3}$ cup chopped walnut meats, 1 tablespoon sugar, $1\frac{1}{2}$

tablespoons of oil, $\frac{1}{2}$ teaspoon of salt, and $\frac{1}{2}$ cup of water.

Sift the flour, sugar and salt into a mixing bowl, add the oil and the nut meats, mix as for wholewheat sticks. Bake in a medium oven until they will just break off crisp and be a very light brown.

Germea Sticks. 1 cup germea, $1\frac{3}{4}$ cups pastry flour, $\frac{2}{3}$ cup cold water, $1\frac{1}{2}$ teaspoon salt, 1 tablespoon sugar, 3 tablespoons oil.

Put the germea into a mixing bowl by itself and pour over it $\frac{2}{3}$ cup cold water, that it may soak up while the balance of the recipe is in preparation. Sift the flour, salt and sugar into a bowl, add the oil, and rub the flour and oil between the hands until well mixed, then add the wetted germea and work it into a dough, knead it for a minute or two, then roll out and finish the same as for wholewheat sticks.

Cocoanut Crisps, Wafers, Etc. Take the proportions given for making cream rolls, and add $\frac{1}{2}$ cup of shredded cocoanut to the flour. Mix it into a dough as for cream rolls, roll out quite thin, and cut with a biscuit cutter or into any desired shape. Prick well with a fork and bake in a medium hot oven until crisp and a very light brown.

Fermented Breads

Weight for weight, bread must be considered one of the most nutritious of foods. The fact that more than three-fifths of it consists of solid nutriment and less than two-fifths water, gives it a special place in the list of foods, and with it there is no animal food and but few cooked vegetable foods that can make a comparison.

In the study of the chemical composition of bread we find that two-thirds of the volume of a good loaf of bread is made up of gas, and of the solid part less than forty per cent consists of water. Of the chemical constituents necessary for proper nutrition, bread yields a large proportion of carbohydrates, a liberal amount of proteid and mineral matter, and a small amount of fat, making it one of the most nutritious and well-balanced articles of diet.

“The common use of superfine white flour in bread making is neither healthful nor economical.” While the white flour products have a greater total nutritive value, they are really an impoverished food; for in rejecting the germ and the bran, the miller discards some of the most useful constituents of wheat. With the germ, proteid and fat are lost; and the bran being impregnated with mineral matter, when separated from the wheat leaves the bread void of these substances which are so necessary for the building of bone, brain, and nerves. To the natural taste there is something lacking,

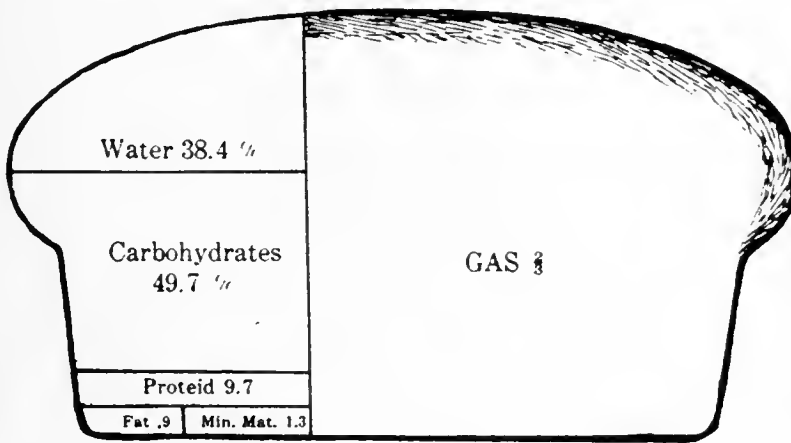


Fig. 3.

Chemical composition of a loaf of wholewheat bread

something not satisfying in the white bread, but which is found in that made from the whole grain. This leaves a craving which many attempt to satisfy with rich pastries, meat, spices, and condiments. Fine flour bread is also a frequent cause of constipation and other unhealthful conditions.

In order to make good bread it is necessary to have good flour. The strength of a flour is determined by the quantity of gluten it contains. Gluten is the chief form of the proteid of wheat. Its elastic qualities when mixed with water, and acted upon by yeast, allow the gas formed to expand without danger of escape. The best flour generally proves to be the most economical, for while it costs more than inferior

grades, it is in reality cheaper, because a given quantity of good flour makes more and better bread than the same quantity of poor flour. The best bread flour is of a cream white color, and when a handful is taken and squeezed it should *not* retain the imprint of the fingers, but should fall like dry sand. Ordinary pastry flour when handled in this way will retain its shape in the hand, remaining in one lump.

Quick rising bread, that is, bread which is brought out in five or six hours, requires more yeast than bread which is allowed to rise over night, but is generally more satisfactory; for the more times bread is allowed to rise, the lighter and finer grained it will be; but some of the wheat flavor will be destroyed. This is the reason that ordinary baker's bread is always lacking in that sweet, nutty, wheat flavor, which so characterizes home made bread, and which makes it so satisfying. The idea, therefore, to be kept before us in bread making, is to produce an article rich in nutritive elements, toothsome, and easily digestible.

Fermented bread is usually made by mixing to a dough, flour, water, salt, and yeast, a small amount of sugar being added to hasten fermentation. The dough is then kneaded until it is elastic to the touch and does not stick to the board; the object being to incorporate air and to distribute the yeast uniformly. It is then covered and allowed to rise until it doubles its bulk and does not respond to the touch; or *when tapped sharply with the fingers, it gradually but stubbornly begins to sink down.* This will require all the way from three to three and one-half hours, and it is best accomplished at a temperature ranging from 75° to 85° F. It is then pressed down in the center and worked together a little, turned over in the bowl and allowed to rise again until about half its former bulk. This will take about three-quarters of an hour or more. It is then turned out on a lightly floured board and kneaded a few minutes, to break the air bubbles and to distribute evenly the gas formed. Then it is molded into loaves, put into pans, and allowed to rise until it doubles its bulk, when it is ready for baking.

Bread should never be allowed to rise until it begins to fall of itself. At this stage it has risen too much and borders on sourness. There are three stages of fermentation; namely, alcoholic, acetous, and putrefactive. Bread should be baked during the alcoholic stage. If fermentation is allowed to go on after the yeast has done its work, bacterial action begins which results in sour bread. It is very important to know when the bread is sufficiently light after it has been placed in the pans. It should never be allowed to rise to its limit before it is put into the oven; but should continue to rise for the first ten to twelve minutes after it has been put into the oven. It is better to bake the bread a little too soon, than to allow it to rise too much. If it rises too much, it will be coarse grained and tasteless. If the bread should in any wise get too light in the pans, it may be molded over and allowed to rise again.

To test the lightness of the dough in the pans, press the loaf gently with the finger, and if it responds quickly to the touch, it may be allowed to rise more. If it responds slowly it should be put into the oven immediately.

Wholewheat or graham bread must not be allowed to go quite so far in the process of fermentation as white bread. Because of the bulkiness of the whole grain, the gas escapes more easily than from that made with a strong gluten flour. Graham and wholewheat bread should be watched closely during the different stages of development, as they rise and get light in less time than white bread. Where wholewheat flour is made from good hard wheat, that is, wheat which is grown where the summers are short and not too hot (as Dakota and Minnesota), the best bread is made from the whole grain using no white flour, or a very little. The dough is a little harder to handle, but you have the sweet wheat flavor. The mineral substances contained in wheat which are so essential to health are then retained in the bread, adding much to its flavor.

For those who can not use the grain in this form, it is well

to use a little rye and oatmeal with the white flour,—about one-third or one-fourth part rye and oatmeal to two or three parts best bread flour.

The western wheat, also that grown farther south, is a soft wheat and does not of itself make good bread, but must be combined with a strong gluten flour. It is very often that graham or wholewheat flour is made from this kind of wheat; then it can only be used in bread making in the proportion of one part graham or wholewheat to two parts strong white bread flour, or about these proportions.

Bread is also made by setting a sponge at the beginning, making a batter of the water, yeast, and flour, and letting it rise until the batter gets charged with the yeast, then adding any other ingredients, as fruit and shortening for fruit bread, the shortening for buns, or the cracked grain for coarse bread; and then working it all into a dough. Ordinary white bread, wholewheat, and graham, are often made by the same process. A sponge is sufficiently light when it appears frothy and is full of bubbles. It will not rise much. The time required will vary with the quantity and quality of yeast used, and the temperature of the room where it is set to rise.

As a general rule; with the best quality of bread flour, three measures of flour to one of water are required to make a dough of the proper consistency. For wholewheat or graham bread, a little less flour is used to the same amount of liquid. Buns and fruit bread which must be of a softer dough, require still less flour, as may be seen later.

The most convenient yeast is that sold as compressed yeast. It should be used only when fresh, which may be determined by its light color and absence of dark streaks. When compressed yeast is not obtainable, very good results are secured by the use of the following recipe:—

Two cups sliced raw potatoes, 2 tablespoons sugar, 1 cake dried yeast.

Add enough cold water to cover the sliced potatoes, and cook well done. Mash them through a colander, and add enough hot water to make one and one-half quarts in all. When cool, add the sugar and the yeast cake (which in the meanwhile has been dissolved in one-half cup of water), and mix well, cover tightly, and let it stand in a warm room over night. In the morning it should be lively and covered with a white foam.

For Ordinary Bread—white, wholewheat, etc.,—use $1\frac{1}{2}$ cups liquid yeast and $\frac{3}{4}$ cup water to $6\frac{1}{2}$ cups good flour. For buns, fruit bread, etc., the yeast is used a very little stronger than for ordinary bread: $1\frac{1}{2}$ cups liquid yeast to $\frac{1}{2}$ cup water. To keep this yeast, put it into a glass or stone jar, cover well, and keep it in a dark cool place.

White Bread. 6 cups best bread flour, 1 pint water, $\frac{1}{2}$ ounce compressed yeast, 1 tablespoon sugar, 1 tablespoon oil, 1 tablespoon salt.

Sift the flour into a mixing bowl and make it hollow in the middle; dissolve the yeast in the warm water, add the salt, sugar, and oil, and pour into the flour. Take out from the side a good handful of flour to be used on the board, draw in the flour with a large spoon and make it into a dough, turn out on a floured board; rub off all the particles of dough sticking to the sides and bottom of the dish, and knead until it is elastic to the touch and does not stick to the board, using just as little flour as possible to keep the bread from sticking to the board. By keeping the bread in motion continuously, very little flour will be needed. The kneading of white bread will take about twenty minutes or more. Oil the bowl and drop bread in, turn it over in the bowl so it leaves the top oiled, which will help to keep a crust from drying on. Cover well and let it rise until it doubles its bulk and does not respond to the touch, using the test given above. This will take about three hours or more, then knock it down in the center and work it together, turn it over in the bowl, and let it rise until it is about one-half more than its former bulk, then

turn it out on a slightly floured board and work it together for a few minutes. Divide it into three pieces, knead each loaf into a hard ball, flatten down and roll the dough up into a hard roll, and drop it into an oiled bread tin. In molding the bread into loaves, it is very important that each loaf be well worked together. If the bread is put into pans in soft loaves, that is, soft because they were not worked enough, the bread will rise flat on top instead of rounded, and will be apt to fall when put into the oven. After being put into pans, brush over the top of each loaf with oil to keep a crust from drying on.

Bread should be baked in a quick oven to begin with. The oven should not be so hot as to burn the outside of the loaf before the inside of the loaf is cooked, but should be of such a temperature that the bread may rise for the first ten minutes or more, and then have sufficient crust to hold it up, when the fire should be closed up to hold a steady heat until the bread is done. For the small loaves, forty to forty-five minutes is generally sufficient; for the larger ones or those of ordinary size, one hour to an hour and a quarter. A well baked loaf may be lifted from the pan and placed upon the palm of the hands without burning it. This should always be the case when bread is well baked and the moisture evaporated. When done remove from the pans and lay on the side on a wire rack to cool. If brushed over the top with warm water just after taking them out of the oven, the crust of the bread will keep softer and it will give it a nice color.

Wholewheat Bread. 3½ cups white bread flour, 2 cups wholewheat flour, 1 pint water, ½ ounce yeast, 1 tablespoon sugar, 1 tablespoon oil, 1 tablespoon salt.

Mix the dough the same as for white bread, only that it is not to be kneaded so long as white bread; work it enough to mix well, kneading it lightly, and put it into an oiled dish, cover, and finish the same as for white bread, only it needs a little closer watching and must not be quite so light in the pans as white bread. The wholewheat and graham flour

used in these recipes are made from the Western soft wheat mixed with a strong gluten white flour.

Graham Bread. Same as wholewheat bread, except that graham flour is used instead of wholewheat.

Rye Bread. Mix as for graham bread, except that rye flour is used instead of graham. With a little care more rye flour may be used, about equal quantities of rye and white flour.

Fruit Bread, Rolls, Buns, Etc. 5 cups of bread flour, $1\frac{3}{4}$ cups water, $\frac{1}{2}$ ounce yeast, $\frac{1}{3}$ cup sugar, $\frac{1}{2}$ cup oil, 1 tablespoon salt, 2 cups sultana raisins, 2 eggs.

The eggs may be omitted if desired. Sift the flour, salt, and sugar into a bowl, dissolve the yeast in the warm water (about 105° F.), add the beaten eggs, and pour it on one side of the flour in the bowl. Draw in enough flour to make a batter that will drop from a spoon, quite thick; cover, and let it rise until very light and full of bubbles,—about one and a half to two hours. Then add the oil and beat it into the sponge until no oil is visible, care being taken not to get the dry flour mixed with oil, for “yeast does not readily absorb greased flour.” When the oil is worked into the sponge, add the raisins, previously scalded and warm. Draw in the flour and work it into a dough. Turn out on a well floured board, and dust with flour to keep it from sticking to the hands; fold it over and work it together until well mixed,—about ten minutes or more,—then cover and let it rise to full proof as for white bread, using the same test for lightness. Then knock it down and work it well together, and let it rise again until it is about two-thirds its former bulk, then it is ready to be molded and put in pans. Finish the same as for white bread.

The same dough may be made into buns or rolls, and if a finer grain is desired than this the dough may be pounded back the second time, letting it rest a half hour before making it into buns. This dough must always be a soft dough.

Graham Buns. 3 cups bread flour, $1\frac{1}{2}$ cups graham flour, $1\frac{3}{4}$ cups water, $\frac{1}{2}$ ounce yeast, $\frac{1}{4}$ cup oil, 2 teaspoons salt, $\frac{1}{4}$ cup sugar.

Sift the white flour, salt, and sugar, into a mixing bowl, dissolve the yeast in the warm water, pour on one side of the white flour, and make a sponge as for fruit bread. When light and full of bubbles, add the oil and mix into the sponge by beating with a large spoon; add the graham flour and mix all into a dough. Have the board well floured to begin with, as this must be a very soft dough. Turn out the dough, sprinkle it over with a very little flour to keep it from sticking to the hands. Pat it down with the hands, fold it over and work it together until it is well mixed, using just enough flour to keep the dough from sticking to the board. Return the dough to the bowl, then cover it and let it rise until it is light, using the same test as for wholewheat bread; then knock it down in the center, turn it over in the bowl and let it rise until about one-third more than its former bulk, or for about twenty minutes; then turn out on a floured board, work together very lightly, mold and roll out into buns about one and one-half ounces in weight each, lay quite close together in an oiled pan, and let them rise until they respond very weakly to the pressure of the fingers; bake in a quick oven.

Soups

Soups are usually divided into two classes:—

1. Broths, or thin soups, to which may be added cooked grains or vegetables cut in various shapes and sizes for garniture, and to give variety and flavor. While these thin soups are lacking in nutriment to be found in those made of more solid foods, they are valuable, however, for the stimulating effect they have on the gastric juice, and when taken at the beginning of the meal, and in small quantities, they aid in the digestion of the more solid foods.

2. Those which usually have as their basis cooked vegetables, grains, or legumes, forced through a strainer and diluted with the liquid in which they were cooked, or with milk or cream, or both. Like all other foods, soups require the action of the saliva for digestion, and when eaten slowly with some dry foods as sticks or crutons, are both appetizing and nourishing.

Cream of Tomato. 1 cup tomato pulp, $\frac{2}{3}$ cup thin cream, 1 tablespoon flour, salt to taste.

Heat the cream in a double boiler. Bring the tomato to boil in another sauce pan, thicken each slightly with the flour braided smooth in cold water; then set on the edge of the stove and pour the tomato into the prepared cream, season to taste and strain again through a fine strainer and serve. By thickening the cream and tomato slightly before mixing, the curdling, which is such a frequent cause of disappointment in making this soup, is largely avoided.

Cream of Corn. $\frac{1}{2}$ cup corn, $1\frac{1}{4}$ cups milk, $\frac{1}{4}$ cup rich cream, 1 tablespoon flour.

Grind the corn through a fine mill; put it into a double boiler with the milk, and heat to boiling point; braid the flour smooth in cold milk or water, stir into the corn, and let it cook twenty minutes; mash through a strainer and finish with the cream; add salt to taste, and serve.

Cream of Green Peas. $\frac{1}{2}$ can of green peas, $\frac{1}{3}$ cup water, 1 cup milk, $\frac{1}{2}$ cup rich cream.

Add the water to the peas, and heat it to the boiling point, then mash them through a colander. Heat the milk and cream separately in a double boiler. Force the peas through a colander, add the hot milk and cream, season, and strain through a fine strainer. Fresh peas are far the best for this soup when in season.

Cream of Potato Soup. $1\frac{1}{2}$ cups sliced raw potato, $1\frac{1}{2}$ cups cold water, 1 green onion, 1 cup thin cream, salt to taste.

Add the cold water to the sliced potato, onion, and salt,

and boil until the potato is well done. Force it through a fine colander. Have the cream heated separately in a double boiler, and pour into the potato; salt to taste, strain through a fine strainer, finish with chopped parsley if desired, and serve.

Juilenne. $\frac{2}{3}$ cup potato, $\frac{1}{3}$ cup carrot, $\frac{1}{3}$ cup turnip, $\frac{1}{2}$ cup cauliflowerlets, 2 stalks celery, 1 ripe tomato, 1 small onion, 2 cups water, 2 cups bean broth, chopped parsley.

Cut all the vegetables except the cauliflower into thin shreds of about one-half inch lengths. Add the carrot, turnip, celery, onion, and salt to the water, and when they are just barely done add the cauliflowerlets, potato, and tomato and cook until all is thoroughly done, but avoid mashing them up. Finish with a little chopped parsley, and serve.

Potage St. Germain. 1 cup sliced raw potato, $\frac{1}{3}$ can green peas, $\frac{1}{4}$ cup celery, 1 tablespoon onion, 2 cups water.

Add the sliced potato, celery, onion, and salt to the water, and boil until potatoes are well cooked. Add the peas, bring to a boil, mash up well with an egg beater, and force through a fine strainer; serve with crutons.

Fruit Soup. 1 cup blackberry or strawberry juice, $\frac{2}{3}$ cup water, 1 teaspoon lemon juice, $1\frac{1}{2}$ tablespoons sago, sweeten to taste.

Heat the liquid to the boiling point in a double boiler, wash the sago and drain well from the water, stir into the fruit juice; let it cook in double boiler until the sago is transparent. When served cold, drop a choice ripe berry into each bowl on dishing up.

When making cream soups from fresh vegetables as lettuce, cauliflower, celery, onion, etc., the vegetable is simply used as a flavor, the body of the soup being made from a mixture of potato, water and onion, and the vegetable added for flavor and garniture. Thus, by being able to make one of these soups, others can be made by substituting different vegetables for flavor and change. As an illustration we give the following one:—

Cream of Lettuce. $1\frac{1}{2}$ cups sliced raw potato, $1\frac{1}{3}$ cups cold water, 1 large head lettuce shredded, 1 round tablespoon onion, 1 cup milk, $\frac{1}{2}$ cup thick cream, salt to taste.

Put the sliced potato, onion, water, and salt on to cook, and when the potato is about done, add the shredded lettuce and let it boil rapidly for about ten minutes or more. Have the milk and cream heated in another vessel. Mash the potato and lettuce through a colander, adding the hot milk and cream as it goes through. Put again through a fine strainer, serve with croutons or small bits of shredded and wilted lettuce. Very green, or outside leaves of lettuce are bitter, and should not be used for soup, but should be first removed.

Grains, Nut Foods, Entrees

In seeking to provide a balanced diet, a few suggestions may be helpful. In the first place, flesh foods contain a very high per cent of proteid matter, with no carbohydrates; thus, in a given quantity eaten, too much proteid is the inevitable result. This high per cent of proteid, as stated in the preceding chapter, is productive of no good, and is a cause of positive harm. Therefore, it should not be our aim to bring the per cent of proteid up to that contained in meat; this would only tend to defeat one of the main objects of health reform,—that of providing a balanced diet. Our aim should be to provide a diet that will take into consideration the main functions of food in the body.

The comparison between the body and the locomotive engine serves as an illustration for studying the fuel value of foods. While iron is essential to keep the engine in repairs, the greatest demand, however, will be for fuel with which to heat the boiler. So in the vital economy; proteid like the iron is essential for the growth and repair of tissue and the body waste; but beyond this it is inferior to carbohydrates and fats, and as different kinds of wood and coal are capable of giving off different degrees of heat, and also giving off that

heat in longer or shorter periods of time; so different food stuffs work in about the same way. Also different kinds of coal, after being burned, leave a residue of clinkers to be raked out of the furnace; so with the overeating of proteid foods, there is an extra amount of work for the kidneys to rid the system of accumulated poisons.

Then we should remember that fresh vegetables are by no means the most nutritious food, for, as may be clearly seen, water enters largely into their composition. Some, in leaving off flesh foods, make a mistake in making vegetables, as roots and tubers, the principal article of diet. These vegetables, combined with grains and nuts, will give a well balanced diet. The legumes are a highly nutritious food, and when properly prepared may be used in a variety of ways in making dishes that are wholesome and pleasing to the taste. They are, however, a heavy food, and for people leading sedentary lives, they should not be indulged too freely. Grains, combined with nuts and nut foods and some vegetables, as corn, peas, tomatoes, etc., will give a great variety to the bill of fare of dishes that are simple, healthful, and nourishing.

The various nut foods on the market, composed chiefly of grains and nuts, contain the nutritive elements of food in a very concentrated form, and should not be eaten too freely, but should be combined with other foods. A few examples of how they may be made into appetizing dishes will be given in some of the following recipes. Other nut foods of a similar nature may be used in the place of the ones given, if desired.

Legumes

The most common representatives of this family which are used as foods are the various kinds of beans and peas, also lentils. Taking the world over, legumes are, next to cereals, the most valuable and the most extensively used among vegetable foods. They are found in all climates and countries. The lentil is one of the most ancient of food plants. It has

been grown from early times in Asia and the Mediterranean countries.

Many people with weak digestion often experience distress after eating boiled beans or peas. By removing the hulls in their preparation this is largely overcome, and in this manner they may be made into a variety of ways that are appetizing as well as nourishing. When they are known to be old, they should be soaked over night before cooking.

Stewed Lima Beans. Pick the beans over, wash them thoroughly, and lift them out from the water to remove any small pieces of grit that may be on the bottom of the kettle. Put them on the fire in cold water, add one teaspoonful of vegetable oil to each cup of beans, and let them boil gently, after boiling begins, until they are thoroughly done; salt should be added after they have boiled a half hour or so, to give them flavor.

Lima Bean Puree. Drain the beans well, and mash them through a colander to remove the hulls. If they are very soft, set them in the oven to dry out a little, to about the consistency of a mealy mashed potato. To two cups lima bean puree add one-fourth cup rich cream, salt to taste, put in fireproof baker, mark on the top with a knife, brush over with milk or cream, and put upon the top grate of the oven to brown, and send to table. This mixture may be shaped into croquettes or cutlets and baked, then served with a gravy. The recipe given above for stewed lima beans may be taken as a guide in cooking most of the legumes, of which the following will be simply variations from this rule.

Stewed Red Beans, Creole. $1\frac{1}{2}$ cups red beans, 6 large whole or 2 cups stewed tomatoes, 2 round tablespoons minced onion, 1 tablespoon oil, salt, 1 small clove garlic.

Prepare the beans as for stewed lima beans, put the oil, the onion and garlic on the stove in a small saucepan and cook a few minutes, but do not brown the onion. Add this to the beans with salt, and cook until extra well done, then

have the ripe tomatoes peeled and quartered, add them to the cooked beans, and let them cook for ten minutes after boiling begins, or longer. Season with celery salt, dish up with a little chopped parsley on top.

Savory Lentils and Rice. 1 cup lentils, 2 cups boiled rice, 1 round tablespoon minced onion, 1 tablespoon minced celery or $\frac{1}{4}$ teaspoon celery salt, a sprinkle of sage, 1 cup stewed tomatoes.

Wash and prepare the lentils as for the stewed red beans, add cold water and put on to boil. Make the oil quite hot, drop in the minced onion and celery for a few minutes, and then add it to the lentils, cook until well done with salt to taste, then add the tomato, and boiled rice, and a little sage, let it boil up well and serve with a sprinkling of parsley on top; a little rich cream may be used to finish, if desired.

Lentil and Rice Patties. $1\frac{1}{2}$ cups boiled rice, 1 cup lentil puree, 1 egg, $\frac{1}{4}$ cup cream, salt and sage to taste.

Mix all the ingredients, and divide into portions about the size of a large egg. Form into small cakes about two-thirds of an inch thick, lay in an oiled baking pan, brush over with cream or milk, and bake on the top grate of a hot oven until a light brown, serve with a tomato or cream sauce.

Legume Cutlets. 1 cup lima bean puree, 1 can green peas, $\frac{1}{3}$ cup zwieback crumbs, 1 egg, 1 tablespoon thick cream, or 1 teaspoon oil, salt to taste.

Bring the peas to boil on the stove and drain well (saving the broth for gravy), mash them through a colander, and set into the oven to dry out a little so it can be handled, mix all the ingredients with the egg beaten slightly, then divide as for lentil rice patties, but instead of making them round, roll them out in the shape of a long cork, only that one end be pointed, bend the point to one side to give it a curve, flatten down with knife to about two-thirds inch thick, mark on top with knife, brush over with milk or cream, and bake the same as lentil rice patties. Serve with cream sauce flavored with the broth of green peas and a little of the pulp, if desired.

Dried peas are generally of two kinds,—the green split peas, called “Scotch peas” and the yellow peas, known as “English split peas.”

Croquettes of Scotch Peas. 1 cup pea puree, $\frac{1}{2}$ cup soaked stale bread, 3 tablespoons rich cream, 2 teaspoons minced onion, salt to taste.

Put the cream and onion into a sauce pan on the stove, and reduce down to about one-third. Mix all the ingredients well, roll into round balls about the size of a large egg, form into squares with a knife, having them about one inch thick, one inch wide, and one and a half inches in length; mark on the top with a knife. Brush over lightly with milk or cream, and bake on the top grate in a hot oven.

Baked Corn Nut Pie. 1 cup corn pulp, $\frac{2}{3}$ cup warm milk, $\frac{1}{4}$ cup cream, $\frac{1}{3}$ cup light colored zwieback crumbs, $\frac{1}{2}$ cup diced nuttolene, 1 egg, 1 tablespoon chopped onion, salt and celery salt to taste.

Heat the milk to about 120° F. and pour over the crumbs; grind the corn through a fine mill and add to the crumbs with the egg slightly beaten, and salt and celery salt to taste; mix well. Put the onion and cream into a small sauce pan and reduce to about half its quantity of liquid, add the diced nuttolene, salt to taste, and when hot through remove from the fire. Fill a small baking pan half full of the mixture, sprinkle over it the nuttolene, then recover with the corn mixture. Bake in a medium oven until set and a nice brown; let it stand fifteen minutes, then cut into squares and dish up.

Cream Noodles. 2 eggs, $\frac{2}{3}$ cup flour, $\frac{1}{4}$ cup thin cream, salt to taste.

Beat one fair sized egg slightly, add the flour all at once, mix well with a heavy spoon, turn out on a floured board, and knead a few minutes; divide into three pieces, roll out into thin sheets, have them well floured, and let them lie to dry out a little, then cut them into long strips about one and one-half inches in width, they are then cut crosswise into fine shreds. Have salted water boiling hot, sprinkle

in the noodles; if they are put in all at once they will stick together. Let them cook fifteen minutes, drain and return to the sauce pan, cover and set on the edge of the stove, add the cream, and when all is hot add the beaten egg, mix well and do not let boil; just heat enough to thicken so it will dish up on the plate and not run; salt to taste.

Spanish Rice. $\frac{1}{4}$ cup uncooked rice, $\frac{1}{2}$ cup cold water, $\frac{3}{4}$ cup tomato pulp, $\frac{1}{4}$ cup rich cream, 1 tablespoon diced onion, 1 tablespoon diced celery, 1 teaspoon browned flour, $\frac{1}{4}$ teaspoon sage, salt to taste.

Brown the rice in a small pan on the stove or in a hot oven until a golden brown, wash and put it into the inner part of a double boiler. Add the water and salt and set on a good fire and let it boil rapidly until the water is almost evaporated and the rice looks dry, then set into the outer part of double boiler and let steam. Put the finely diced onion and celery with the cream into a small sauce pan, and let it reduce down until the fat of the cream nearly separates; then add the tomato pulp, sage, and browned flour, bring to a boil, salt to taste, and pour it over the rice; mix well and let it cook twenty minutes, or until it will just pile nicely when dished up, and not run. Sprinkle with chopped parsley on top, or serve a sprig on the side of each order.

Nut Cero Stew with Dumplings. $1\frac{1}{2}$ cups raw potato cubes, 1 round tablespoon chopped onion or more, 2 cups cold water, $1\frac{1}{2}$ teaspoons salt, $\frac{3}{4}$ cup rich cream, $\frac{1}{3}$ cup flour, 2 eggs, $\frac{1}{4}$ pound nut cero cut into large cubes.

Put one-half cup of cream into a small sauce pan and bring to a boil, when it comes to a good boil add the flour all at once, and stir smooth; cover and let cook on the edge of the stove five minutes, then remove; when cool add the eggs one at a time, stir the batter until the egg disappears and the batter is smooth; add the remaining egg and work it likewise into the batter; beat the batter well with the spoon that it may be perfectly smooth. Have the potato cut into one-half inch cubes, add the cold water, onion, and salt; and

when the potato is nearly cooked through, drop in the batter by spoonfuls, scraping it off the spoon so it will drop in one piece into the boiling stew. Cover, and let cook about ten minutes. Have one tablespoon lightly browned flour and a bit of sage braided smooth in cold water, turn into stew, season with salt to taste. Celery salt may be added if desired; then add the nut cero which is cut in large cubes, and the remaining cream. Shake the sauce pan so as to mix well; let stand on the edge of the stove to draw for ten minutes; dish up on a platter, having a dumpling on top. Sprinkle over a little finely chopped parsley, and serve.

New England Stew. 2 cups potato, 1 cup carrots, 1 cup turnips, 1 cup pearl onions, 2 teaspoons oil, salt to taste, 1 tablespoon flour.

Select if possible young and tender vegetables, peel them and cut them into quarters or eights according to their size, so each piece has about the same appearance and size. Put the carrot, turnip, and onion, on to cook in cold water and salt, add the oil and let cook until the vegetables are quite tender, then add the potato and cook until well done, braid the flour smooth in cold water, and stir into one side of the vegetables in such a way as not to break them up. Two cups cabbage may be cooked with the coarse vegetables, if desired. Dish up with chopped parsley on top.

Protose and Rice Timbales. $\frac{3}{4}$ cup cooked rice, $\frac{2}{3}$ cup rich milk, $\frac{1}{2}$ cup diced protose, 1 tablespoon grated onion, 1 egg, 2 small stalks finely chopped celery, sage and salt to taste.

Beat the egg slightly, add the milk, mix all the ingredients, and fill individual molds, set into baking pan containing a little water and bake in the oven until set, let it stand ten minutes then run the point of the knife around the edge, turn out on a platter, and pour a large spoonful of celery or tomato sauce over the top, and sprinkle with chopped parsley.

Baked Macaroni with Olives. $\frac{1}{2}$ cup uncooked macaroni, $\frac{1}{3}$ cup chopped ripe olives, 1 tablespoon chopped onion, 2 tablespoons tomato, 1 cup of the water in which the macaroni was

cooked, 1 tablespoon vegetable oil, $2\frac{1}{2}$ tablespoons flour, salt and celery salt to taste.

Break the macaroni into one-half inch lengths and drop into boiling salted water, cook until it is well done; put the oil in a small pan on the stove, and when hot add the flour and stir until well browned, then add the onion and chopped olives. Let them cook five minutes, then add one cup macaroni water, and two tablespoons tomato; let it boil ten minutes. Have the macaroni well drained, and while hot put it into the gravy, turn into a baking dish, grate a few fresh bread crumbs over the top, and with a spoon press them down onto the gravy so they become moistened through; bake until a nice brown.

Macaroni Au Gratin. Break the macaroni into one inch lengths and drop into boiling salted water, and let cook until well done. Pour into a colander and let it drain well, after which put it into a granite baking pan and pour over enough cream sauce to barely cover it; mix it well and grate some fresh breadcrumbs on top to give it a good color. Sprinkle over a little thin cream, and with a large spoon press the crumbs down so they become softened by the liquid, and will brown without burning. Bake in a medium oven about thirty to forty minutes, or until a nice brown.

Macaroni and Rice Croquettes. 1 cup cooked boiled rice, $1\frac{1}{2}$ cups cooked macaroni, $1\frac{1}{2}$ tablespoons oil, $1\frac{1}{2}$ tablespoons flour, 1 round tablespoon onion, 1 egg, $\frac{1}{4}$ cup potato water or milk, salt and celery salt to taste, and chopped parsley.

Put the oil in a small saucepan on the fire, and when hot add the flour and onion, and stir for a few minutes, then add the hot liquid and stir into a paste, add the beaten egg and stir over the fire until it thickens, then set on table, salt to taste and a little celery salt, add the rice, macaroni, and chopped parsley, mix well; when cool form in the shape of a large cork, lay on board and flatten slightly with the blade of a knife, leaving it about three-fourths inch thick, brush over with a little cream, and bake in a hot oven. One fourth

cup rich cream cooked down may be used instead of the oil, if desired.

Baked Spaghetti. 1 cup spaghetti raw, $\frac{1}{2}$ cup cream, 2 eggs, salt.

Break the spaghetti up into one inch lengths and drop into salted boiling water and cook well done, then pour into colander and let drain. Beat two eggs and add the cream and salt to taste. Pour over the spaghetti and mix well, put into a baking dish and grate a few fresh bread crumbs over the top, and press them down with a spoon so they get moistened, bake in a quick oven to a nice brown.

Nut Roast. 2 cups zwieback crumbs, $\frac{1}{4}$ cup nut butter, 1 tablespoon grated onion, salt and sage to taste, $\frac{1}{2}$ cup hot water, $1\frac{1}{2}$ cups cold water.

Dissolve the nut butter in the hot water, add the cold water, salt, sage, and onion, then the crumbs, mix well; oil a bread tin, fill about one-half full and press together, brush over with milk and bake thirty minutes or more. Let stand ten minutes before serving, then slice and serve with tomato sauce. When it is cold it may be sliced and reheated in the oven and makes a nice breakfast dish in this manner.

Baked Dressing. 1 pint soaked stale bread, 2 tablespoons minced onion, 2 tablespoons minced celery, 2 tablespoons vegetable oil, 1 egg, $\frac{1}{2}$ teaspoon sage, and salt to taste.

Soak the stale bread in cold water until soft through, pour into a colander and let drain; press lightly between the hands leaving it very soft. Put the onion, celery, and oil into a small sauce pan, set on the edge of the stove and let it simmer a few minutes, but do not let brown at all. Mix all the ingredients lightly, not breaking the bread up too fine, just enough to mix well. Put into an oiled baking pan and bake one-half hour or more. One-fourth cup of finely chopped walnuts will give the dressing a nice flavor and color, if desired. To dish up, lay the protose on a carving board, put a spoonful of dressing on the platter, lay a slice of protose on top,

and pour a spoonful of gravy over all. Serve with a sprig of parsley at one end.

Steamed Rice. $1\frac{1}{3}$ cups cold water, $\frac{1}{2}$ cup rice, $\frac{1}{2}$ teaspoon salt.

Wash the rice well and put it into the inner cup of a double boiler, add the salt and water and put on the stove, bringing to a boil; let it continue to boil slowly until the water is reduced so the rice looks dry; then set it into the outer boiler and let steam forty minutes. If a double boiler is not at hand, let the rice cook down as above, and set on the back of the stove to dry out, having the sauce pan well covered.

Browned Rice. $\frac{1}{2}$ cup of rice, $1\frac{1}{3}$ cups cold water, 1 teaspoon salt.

Brown the rice in a small pan on the top of the stove or in a hot oven, stirring so it will not burn, until a golden brown; wash and drain it as dry as possible, put into the inner part of the double boiler, add the water and set on the stove, and let it boil until the rice appears dry and the liquid mostly evaporated; then set into the outer boiler to steam thirty minutes to one hour.

Gravies and Sauces

Brown Sauce No. 1. $\frac{1}{3}$ cup thick cream, 1 tablespoon onion, 4 tablespoons well browned flour, $1\frac{1}{2}$ cups potato water or bean broth, 2 tablespoons tomato, salt to taste.

Cook the cream and onion in a sauce pan until the oil nearly separates from the cream, then add the browned flour, stir a few minutes, and add half of the liquid and beat smooth, add the remaining liquid and let it cook ten minutes, salt to taste, strain and serve.

Brown Sauce No. 2. 1 tablespoon vegetable oil, $2\frac{1}{2}$ tablespoons flour, 2 tablespoons tomato, 1 round tablespoon onion chopped fine, 1 cup bean broth, $\frac{1}{3}$ cup hot water.

Put the oil into a pan on the stove, when hot add the flour and keep stirring until quite brown. Then add the onion and

stir over the fire about five minutes, then add the hot water and stir smooth, add the bean broth and tomato, let it cook ten minutes, strain and serve.

Olive Sauce. Add eight chopped ripe olives to the onion and make the same as brown sauce No. 2.

Brazil Nut Sauce. 5 brazil nuts ground fine, 4 tablespoons flour, $1\frac{1}{2}$ cups potato water.

Brown the flour in a pan on top of the stove, when it is of a light golden color add the nuts and stir through the flour for five minutes, add half of the liquid and stir smooth, add the balance of the water and let it cook fifteen minutes. Salt to taste, strain and serve.

Cream Sauce. 1 cup milk, $\frac{1}{4}$ cup cream, 3 tablespoons flour.

Heat the milk and cream in double boiler to boiling point, braid the flour smooth in cold milk and stir into the hot milk. Let cook twenty minutes. Salt to taste.

Celery Sauce. $\frac{3}{4}$ cup celery, $\frac{1}{4}$ cup rich cream. $\frac{3}{4}$ cup hot water, 2 tablespoons light browned flour, salt to taste.

Wash crisp white celery with a brush to remove grits. Split once or twice lengthwise, then shred very fine, add the cream and let it cook down slowly until the oil nearly separates from the cream, then add the boiling water and salt and let cook ten minutes. Braid the light brown flour smooth in cold water or milk, stir it into the celery and let simmer until quite thick.

Nut Sauce. Dissolve one heaping tablespoon nut butter in a little hot water or milk, and add to the cream sauce.

Tomato Sauce. 1 cup tomato pulp, 2 teaspoons vegetable oil, one round teaspoon chopped onion, $1\frac{1}{2}$ tablespoons browned flour, salt and celery salt to taste.

Put the oil in a small stewpan on the fire, when hot add the onion and stir a few minutes but do not brown, add the browned flour, stir smooth, then add the tomato, stir smooth and let boil up well, season with salt and celery salt, and strain through a fine strainer.

Vegetables

Vegetables may be divided into two great classes:—

1. The coarse or fibrous vegetables, comprising the roots, tubers, bulbs, stems, and leaves.
2. The finer vegetables, as tomatoes, squash, corn, green peas, shelled beans, etc.

Vegetables, like all starchy foods, should be put to cook in boiling water, the object being to soften the cellulose as well as to swell and burst the starch grains. While there is scarcely any other food more universally used by rich and poor alike in making up a part of their daily bill of fare, yet how often the vegetable is spoiled in cooking. Vegetables should always be cooked thoroughly done. Served in the half cooked condition so often met with, they are unpalatable and indigestible; while on the other hand coarse vegetables should be cooked in plenty of boiling water, and should be removed from the fire when done. Longer cooking makes them insipid in taste, and with too little water in cooking they turn a dark color. Salt should be added the last half hour of the cooking to give flavor. Green vegetables, as peas and string beans, when young and tender, should be cooked in just enough water to cook them well done and preserve their flavor. To retain the green color in the new vegetables, the cover must be left off while cooking and they should cook steadily after they are put on and not be allowed to stop cooking or simmering until they are done. Young tender vegetables, as lettuce, tomatoes, watercress, etc., served in the uncooked state, are valuable for the water and potash salts they contain, also for the stimulating effect they have on the appetite.

New Peas. Shell the peas as soon after picking them as possible, drop into cold water, and skim off any dry leaves or imperfect ones that will come to the top; then dip them out of the water with the hands so as to leave any grit there may be in them on the bottom of the dish; drop them into

boiling water enough to cover them if tender, add salt and let them cook until well done and the liquid reduced to one-third its original quantity. If desired, they may be thickened slightly with flour braided smooth in cold water, and a little cream added just before serving.

Baked Ear Corn. Select tender, well filled ears of corn, draw back the husks and remove the silk, wipe with a clean cloth; recover again with the husk and tie a string around the small end to keep the husks from opening and exposing the ear to too much heat. Lay in baking pan and bake in good oven from one-half to three-quarters of an hour. When done, remove the husks, lay on platter and serve immediately. A few of the inner husks may be left around each ear of corn and sent to the table. Corn cooked in this way is much sweeter and of a richer flavor than when boiled. When corn is boiled, it should be dropped into boiling water; then when it has come to a good boil, set it on edge of the stove to draw for fifteen to twenty minutes. Too much cooking hardens corn and makes it tough and unpalatable.

String Beans should be picked while they are young and tender. Break them between the hands so as to remove any stringy fiber, also the ends. Put one teaspoon of vegetable oil into a sauce pan on the stove, and when quite hot add one pint of string beans which have previously been washed; stir over the fire for a minute, then add enough boiling water to cover them; add salt to season and let them boil quite rapidly until well done. If more water is added, it should be boiling hot.

New Asparagus. Put them into a deep pan of water and wash well, that sand and grit may sink to the bottom; change the water and lift them out, tie them in bundles of about three portions each; lay on a board and trim off the root stems, leaving the stalks about four inches in length; drop them into boiling salted water and cook till they are tender, then set the sauce pan on the table until ready to serve; lift out and drain, lay on platter, cut and remove the strings, and send to the table. Serve with rich cream sauce.

Asparagus Tips and New Peas. Cut the tender part of cooked new asparagus into one inch lengths; cook the peas separately, and when done add enough rich cream to season them well; when it comes to a boil, thicken slightly with a little flour braided smooth in cold milk or water; add the asparagus tips and shake together to mix well and not break them up.

Stewed Tomato. Pour boiling water over ripe tomatoes and let remain about thirty seconds, then drain, remove the skin and the stem with the hard green part adhering to it, and cut into quarters. Put into a sauce pan with about one teaspoon vegetable oil to each cup of tomato, and salt to taste, bring to a good boil and serve.

Scalloped Tomato. If the tomatoes are fresh, then prepare them as for stewed tomatoes, and when they come to a good boil, drain off most of the juice to be used for soups or gravies. Dust the bottom of an oiled baking pan quite thickly with cracker or zwieback crumbs, then a layer of tomatoes about one-half inch deep or more, then sprinkle over a little vegetable oil or rich cream which has been reduced down about half. Of the oil, if used, take one tablespoon to each two cups tomato. Sprinkle a little salt over it, then repeat, covering the tomatoes with a thin layer of crumbs, then a good layer of tomato, season the same as before, sprinkle a few crumbs on top and press them down with a spoon to moisten them, set in the oven and bake to a nice brown.

Summer Squash. When young and tender, summer squash needs only to be washed and quartered. Steam until tender, press between two colanders, or in cheese cloth until quite dry. Mash and season with salt and cream. When the squash is older it must be peeled and have the seeds removed before cooking.

Baked Squash. Steam the squash until about half done, lay the pieces out on a board so they can be sprinkled with salt to season. Dip them first in flour, then in rich cream, lay them close together in an oiled baking pan and pour

over them a little cream so they get well moistened, cover them by turning another pan over them and bake one-half hour, then remove the pan on top and bake to nice brown. They are very good when moistened with the liquor in which they have been boiled, using oil to season instead of cream.

Breaded Egg Plant. Cut the egg plant into slices about three-fourths of an inch thick. Peel the slices and drop them into boiling salted water, and cook barely half done; it will take only a few minutes, then drain, and when cool dip each piece into cream, then into lightly colored zwieback crumbs. Lay the pieces close together in an oiled baking pan, and sprinkle enough cream over them to moisten the crumbs well. Bake in a medium oven until a nice brown and well done. It is better to cover them during the first twenty minutes of baking, then they will keep their moisture better. When cream is not obtainable, dip the vegetable in beaten egg diluted with a little milk or water, and oil the pieces over the top slightly.

Stewed Salsify or Vegetable Oyster. Wash the salsify, then take them one at a time and scrape them, dropping them immediately into cold water to keep them from turning a dark color. When they are thus prepared, lay a few of them at a time on a board and slice with a french knife very thin. Drop them into boiling water enough to barely cover them. (The water should reduce down so there is just enough left to make the sauce for them). When done, thicken them slightly with a little flour braided smooth in cold water. Let them boil up, then add one-fourth cup rich cream to each pint of salsify.

Cauliflower Au Gratin. Remove all the green leaves from the cauliflower and divide it into bouquets or pieces about the size of a large hen's egg. Wash well and drop into boiling salted water and cook until it is tender; care should be taken not to cook it too long, then it will break up. As soon as it is done, drain and lay the pieces in an oiled baking pan; pour over it enough cream sauce to barely cover it, then

grate a few fresh bread crumbs over the top and press them down with a spoon so they become moistened with the cream sauce; sprinkle a little milk or cream over the top and bake until a light brown.

Baked Cream Corn. 1 cup corn pulp, $\frac{2}{3}$ cup rich milk, 1 egg, $\frac{1}{3}$ cup light colored zwieback crumbs, $\frac{2}{3}$ teaspoon salt, a little celery salt.

Warm the milk to about 120° F., pour it over the crumbs and let them soak. Have the corn ground through a fine mill. Mix all the ingredients, put into an oiled baking pan, put a teaspoon of milk or cream over the top to give it a nice color. Bake until set and a nice brown.

Roasted Potatoes. Choose medium sized potatoes; peel them and lay them in a baking pan, sprinkle with a little salt and dredge with flour; brush them over the top with an oiled brush, and pour on water so the potatoes are nearly covered; set in the oven and bake about one hour and a quarter or more; the liquid should cook down just enough to leave a thin gravy to pour over the potato on dishing it up.

Scalloped Potato. Slice some peeled raw potatoes into thin slices, put into an oiled granite baking pan about one inch deep of sliced potatoes, sprinkle with salt, then with lightly browned flour, repeat the process again, then pour on enough water to cover the potatoes; the pan should not be quite full, or it will boil over in the oven; set the pan into the oven, and bake about one hour and a half. Milk may be used in place of water, if desired.

Potatoes Dauphine. 2 cups mashed potatoes, 2 tablespoons thick cream, yolk 1 egg, $\frac{1}{2}$ teaspoon salt.

Boil the potatoes, drain well, and mash them through a colander. Return them to the sauce pan and set on the edge of the stove. Add the cream to the yolk, beat slightly, and pour into the potato; beat well with a wooden spoon; the potato should be hot so it will dry out and not be too soft. When partly cool turn out on a board slightly floured, and

divide into pieces about the size of an egg; mold into leaf shape, diamond shape, squares or patties. Mark on the top with the edge of a knife, lay in an oiled baking pan, leaving a little space between them. Brush them over the top with a little milk or cream, and bake on the top grate of a hot oven until a light brown in color.

Salads and Dressings

Salads, composed chiefly of green tender vegetables or fruits and nuts, and served with a dressing, are valuable as a means of supplying fat; they are also valuable for their acids and mineral salts, and being made into a variety of dishes that are palatable and attractive looking, serve as an appetizer or relish.

Mayonnaise Dressing. Yolk of 2 eggs, 1 cup olive oil, $1\frac{1}{2}$ tablespoons or more lemon juice, $\frac{1}{8}$ teaspoon salt.

Beat the yolks and salt, add a half teaspoon of lemon juice; beat well and add the oil drop by drop to begin with, then increase as it gets started, adding now and then a little lemon juice to thin the dressing to the proper consistency. Ingredients should all be cold.

Boiled Dressing. $\frac{1}{3}$ cup cream, 1 egg, 1 teaspoon corn starch, 2 tablespoons lemon juice, salt to taste.

Heat the cream in a double boiler, braid the starch smooth in a little cold milk and stir it into the boiling cream, cover and let it cook ten minutes or more. Beat the egg quite well and add the lemon juice, then pour the hot cream slowly into the beaten egg, stirring meanwhile so as not to curdle the egg, return the mixture to the double boiler and let cook a few minutes, stirring meanwhile, but do not boil, salt to taste and let cool.

Cream Dressing. 1 cup rich cream, $\frac{1}{4}$ cup lemon juice, 2 tablespoons sugar.

Mix the sugar and lemon first. Have the cream beaten until it begins to thicken a little, then mix with the lemon and sugar and use immediately.

Lettuce and Tomato. Arrange the lettuce leaves on a plate; have a ripe tomato peeled and cooled, lay on the lettuce, run a sharp knife across the middle of the tomato, cutting it nearly in two, then crosswise, so the four quarters will fall back and yet hold together underneath. Drop a spoonful of mayonnaise dressing in the center of the tomato and serve.

Jellied Tomato. 1 cup tomato pulp, $\frac{1}{4}$ cup lemon juice, 1 tablespoon sugar, $\frac{1}{4}$ teaspoon celery salt, 2 teaspoons grated onion, salt to taste, $\frac{3}{4}$ cup vegetable jelly.

Mix all the ingredients, and after pouring a small quantity of the liquid into an individual mold, press a thin slice of ripe tomato to the bottom of the mold, then pour on the liquid, filling the mold about three-fourths full; let set, and when cool turn out on lettuce leaf, serve with mayonnaise dressing.

Celery and Nuttolene Salad. $\frac{1}{2}$ cup diced celery, $\frac{1}{2}$ cup diced nuttolene, 1 teaspoon grated onion, 1 hard boiled egg chopped fine, and chopped parsley to taste.

Dilute with boiled cream dressing or mayonnaise, dish up by filling a wetted mold to shape it, and turn out on a lettuce leaf, serve with a teaspoon of dressing on top.

Stuffed Beet Salad. Select small red beets of uniform size, boil in salted water until tender, rub off the dry skin and scrape out the center, being careful not to break the shell; cut the centers into small cubes, to which add an equal quantity of finely diced celery and chopped hard boiled egg. Season with dressing and refill the shell, serve on a bed of crisp lettuce with a teaspoon of dressing on top.

Salad Russe. $\frac{1}{2}$ cup diced celery, 1 cup cooked green lima beans, 1 cup diced lettuce, 1 hard boiled egg diced, grated onion and salt to taste.

Cut the cooked beans into small dice, mix all the ingredients; season with boiled dressing or mayonnaise; serve on lettuce leaf.

Potato Salad. Boil potatoes with skins on in salted water, or better, bake them if convenient, when cold peel the pota-

toes and run a knife through them lengthwise to split in two, then crosswise dividing them into quarters, then slice them very thin, and season as follows:—

1½ cups sliced potato, 1 sliced green onion or more, 1 hard boiled egg, chopped parsley, salt and celery salt to taste.

Chop the egg quite fine, mix all ingredients and dilute with boiled cream dressing; dish up on lettuce leaf and sprinkle a little fresh parsley on top of each order.

Celery Salad. Choose crisp white stalks of celery. Shred them very fine with a french knife, add a little grated onion, salt to taste, dilute with boiled dressing or cream dressing, and sprinkle chopped parsley on top when dished up.

Cole Slaw. Choose cabbage that is fresh and crisp, remove outside leaves, cut in two lengthwise through the stem, remove the stem and shred very fine, let stand in ice water for half an hour, drain well and season with the following dressing:—

Two tablespoons olive oil, 2 tablespoons lemon juice, 1 teaspoon sugar, 2 teaspoons grated onion, salt to taste. Pour over cabbage and mix well; sprinkle chopped parsley over when dished up. Boiled or cream dressing may be used in place of the one given, if desired.

Fruit Salad

Lemon Sauce. ¼ cup lemon juice, ⅓ cup pineapple juice, 2 teaspoons corn starch, ¼ cup sugar.

Braid the corn starch smooth in cold water, and when the juice and sugar comes to a boil, stir in the starch; let cook in a double boiler a few minutes, then let cool.

Fleurette Sauce. ⅓ cup orange juice, 2 tablespoons lemon juice, 3 tablespoons sugar, 1½ teaspoons corn starch, 1 egg.

Heat the orange juice, lemon juice, and sugar to boiling point. Thicken it with the starch which has been diluted with cold water; let it cook in a double boiler for ten minutes, have the egg beaten quite well and pour the hot mixture

slowly onto it, stirring briskly to prevent cooking the egg, return to the fire for a few minutes, stirring the meanwhile, but do not let boil; let cool.

Stuffed Date Salad. Remove pits from well washed dates, and refill each with a half walnut meat, press together, put into a salad bowl and dilute with lemon juice. Serve on lettuce leaf with a tablespoon of lemon sauce poured over.

Fruit Basket. Select medium sized well colored oranges, hold the oranges between the thumb and first finger, let the side of the orange rest on the table, while with a small pointed knife start in the center of the orange and run the blade point first about two inches into the center of the orange, then again in such a manner that when followed all the way round the orange will part in two halves, leaving the edge ruffled with small points of peel like the teeth of a coarse saw. Run the point of a knife around each half near the peel, then with a teaspoon dip out the fruit in one piece. Cut the orange center into small cubes, to which add equal quantities of diced bananas and pineapple and a few strawberries. Dilute with fleurette sauce; fill the orange shells, having them well rounded with the fruit, serve on a white plate with two or three small orange leaves for garniture, and a teaspoon of sauce on top.

Fruit and Nuts. $\frac{1}{2}$ cup diced oranges, $\frac{1}{2}$ cup diced bananas, $\frac{1}{2}$ cup diced apples, $\frac{1}{2}$ cup finely chopped walnuts.

Mix the fruits and season with fleurette sauce, dish up on a lettuce leaf with a liberal quantity of chopped nuts sprinkled on the top.

Fruit Mold. Cook apples or pears with a few thin slices of lemon to flavor and sweeten to taste, when cold drain off the liquor, and to each cup of juice add three tablespoons of lemon juice and one cup of vegetable jelly. Pour into the bottom of a large salad bowl a small quantity of the liquid; then quickly line the bottom and sides with dates cut into strips, the cooked fruit, and with bananas or pineapple, or both. Have the bananas cut into strips and set upright

along the sides. Berries may be used for garnish, if at hand. Fill in the center with fruit, then pour over the liquid to cover, and when set it may be turned out on a plate or platter and dished up at the table. A little red fruit juice may be poured around for a border, or jellied raspberry juice may be minced fine and piled around.

Date and Apple Salad. Select small well colored sweet apples, core them and cut a slice off one end, then hollow out the center by using the apple corer or a teaspoon, being careful not to break the shell. Cut the apple thus removed into small cubes, and to each cup of diced apple add one-third cup diced dates, season with lemon sauce, refill the apple with the mixture. Make a funnel out of small lettuce leaf and press it down in the top of the apple, fill it with a spoonful of lemon sauce, set the apple on a lettuce leaf and serve.

Desserts

The most wholesome desserts are those furnished us by nature which require no preparation, as fruits, either fresh dried or cooked, and nuts. Fruits and grains combined make nice desserts, and may be prepared in a variety of ways. By the use of vegetable gelatin (agaragar), fruit and fruit juices may be molded into attractive looking desserts that are toothsome and inviting. Vegetable gelatin goes much further than animal gelatin, and its vegetable origin guarantees absolute freedom from unwholesome and diseased products. Being free from any flavor of its own, it requires much less flavoring material, leaving the natural fruit flavors unimpaired, and "there is nothing about it to suggest hoofs and horns."

The body requires a certain amount of sugar to keep it in working condition. To meet this demand nature has made provision in the fruits or fruit sugars, honey, etc. There are some people, however, who can not eat fruit; for such it may be well to take sugar in some form. But, as a rule, far too

much sugar is ordinarily used in food. "Sweet breads, sweet cakes . . . perpetuate indigestion and make dyspeptics." However, when people have been accustomed to use these freely, sound judgment should be exercised.

The free use of milk and sugar taken together is especially harmful, and should be avoided. Their place should be supplied by a variety of fruits and nuts, with preparations of fruits and grains served in an appetizing manner. For those who like a simple cake now and then, the following recipes have been prepared. These cakes, being free from any chemical, should be baked a little more slowly than those in which baking powder is used. Just a moderate steady oven will bring these cakes out light and porous.

Sago Fruit Mold. $\frac{3}{4}$ cup blackberry juice, $\frac{1}{3}$ cup water, $\frac{1}{2}$ cup sago, $\frac{1}{4}$ cup sugar.

Wash the sago and have it well drained, bring the liquid and sugar to the boiling point in a double boiler. Wash the sago and drain, add to the hot liquid and stir well; cover and let steam until the sago is transparent, then turn into wetted molds and let cool; when cold and set, turn out on sauce dish and serve with cream or crushed fruit sauce.

Prune Pudding. Soak dried prunes over night. Cook them for two or three hours with a few slices of lemon added to give them flavor. Drain and save the juice separately; put the prunes through a colander to remove the pits, sweeten with honey or sugar, if needed, and flavor with vanilla. Trim the crust off thinly from a loaf of fruit bread, and cut into slices about one-half inch thick. Line a granite baking pan with the bread, pour over enough juice to soak up the bread, cover with the prune pulp about one-half inch deep, repeat the process leaving the prune pulp for the top; set into oven until it gets just barely hot through, so it will set; cool and cut into squares and serve with a teaspoon of whipped cream on top.

Strawberry Whip. 1 cup strawberries, white of 1 egg, $\frac{1}{2}$ cup sugar, 1 teaspoon lemon juice.

Choose well ripened strawberries, wash them and remove the stems, put all the ingredients into a bowl, then beat with a wire egg whip until light and fluffy, which will take twenty minutes or more.

Pile lightly on a dish, and pour a border of crushed fruit or red fruit juice unsweetened around the whip on each dish.

Strawberry Dessert. Take a toasted rice biscuit and lay it on a sauce dish, pour a large tablespoon or more of cream over it to soften it slightly, then drop a large spoonful of strawberry whip on top, in such a manner as to have the dessert piled high and narrow on the dish. Garnish on top with a large ripe berry or a spoonful of crushed berries and serve.

Raspberries or blackberries may be used instead of strawberries.

Banana Loaf. Take two large ripe bananas and press them through a fine colander, add one tablespoon of pineapple juice, mix well. Lay a toasted granose biscuit on a sauce dish and pour over it enough pineapple juice to moisten it, then cover with a thick layer of the banana pulp. Lay another biscuit on top, and moisten as before with pineapple juice, spread on lightly the banana mixture and place a tablespoon of whipped cream on top and serve.

The pineapple juice will keep the banana from turning a dark color.

Fruit Pyramid. $\frac{1}{2}$ cup berry juice (strawberry preferred), $\frac{1}{2}$ cup water, $2\frac{1}{2}$ tablespoons germea, sweeten to taste.

Heat the liquid in a double boiler to boiling point, stir in the germea, and let steam for one-half hour, pour into wetted molds. (It is best to make this dessert in the morning if it is to be eaten at dinner, for it takes a long time for it to jelly.) Turn on a dish and serve with cream or a fruit sauce.

Banana Snow. $\frac{1}{2}$ cup banana pulp, 3 tablespoons sugar, 2 teaspoons lemon juice, a few drops vanilla, white of 1 egg.

Mix all the ingredients and beat with a wire egg whip until very light, about twenty minutes to one-half hour; pile

on a sauce dish. It may be garnished with a red strawberry cut in quarters and placed on top, or with a little jelly.

Flaked Rice and Fruit Mold. Take strawberries or blackberries, and if they are the fresh berries crush a few with enough sugar to sweeten all, and mix them with the berries to be used. Lay in a pan toasted rice flakes about one-third of an inch deep; cover with the berries about the same thickness, then again with flakes, and finish with berries on top; sprinkle over it a few flakes and set a pan of equal size on top and press gently for one hour. There should be just enough juice to soak up the flakes well, the pan should be set inside a larger one, so that if the juice runs over it does not run on the table or floor, when set, cut into squares and serve with whipped cream or crushed fruit sauce. Canned berries may be used if fresh ones can not be obtained.

Vegetable Gelatin (Agaragar). Put one ounce of agaragar to soak in warm water for one hour. Drain well and put into a kettle, to which add one quart of boiling water. Let it boil about ten minutes after boiling begins or until clear. Strain through cheese cloth and it is ready for use. One ounce will solidify three quarts of liquid, inclusive of the water in which the gelatin is cooked.

Orange Jelly. $1\frac{1}{4}$ cups orange juice, $\frac{1}{3}$ cup water, $\frac{3}{4}$ cup sugar, $\frac{1}{4}$ cup lemon juice, 1 cup vegetable jelly.

Mix all the cold ingredients, add the vegetable jelly, mix well, pour into molds immediately, add a few thin slices of orange and let set. When cold turn out and serve with a little red fruit juice around each mold.

Berry Mold. $1\frac{1}{2}$ cups of strawberry or blackberry juice, $\frac{1}{4}$ cup lemon juice, $\frac{1}{2}$ cup sugar, 1 cup vegetable jelly.

Mix all the ingredients and mold immediately.

Jellied Apple. Core and peel medium sized sweet apples, sprinkle a little sugar over them, add enough water to keep them from burning, cover and bake until thoroughly done, and let cool. Take one cup of apple or pear juice sweetened

to taste, add one and one-half tablespoons lemon juice and one-half cup vegetable jelly; put a little red jelly or cherry in the cavity of the apple, press to the bottom of the individual mold, pour over it just enough liquid to cover, and let set; turn out on a dish and serve with red fruit sauce or crushed fruit around. The apples may be left in the pan in which they were baked and the liquid poured over them all. When cool cut into squares and serve.

Pie Crust. 1 quart pastry flour, $\frac{3}{4}$ cup vegetable oil, $\frac{3}{4}$ cup cold water, $\frac{1}{2}$ teaspoon salt.

Sift the flour and salt into a mixing bowl, add half of the water to the oil and beat until it thickens, making a present emulsion, add the remaining water and when mixed well pour all at once on the flour; draw in the flour from the sides of the bowl with a large spoon, mix well, turn out on a floured board and work together, handling as little as possible.

Apple Pie No. 1. Roll out and line a pie plate with crust, have apples peeled and thinly sliced, fill the plate with the sliced tart apples rounding it up well, dust with flour, and if the apples are not tart a little water may be added, sprinkle over one-third to one-half cup of sugar, according to the tartness of the apple. Wet the edges of the crust, roll out a top crust, cover and press the edges well together, mark by pressing the teeth of a table fork gently against the edge all the way around; puncture the top crust in several places to let out the steam to keep them from boiling over in the oven.

Apple Pie No. 2. Roll out pie crust and fit it into the bottom of the tins, trim the edges, prick the bottom and sides through with a fork and bake until crisp and light brown. To two and one-fourth cups apple pulp, add three tablespoons of lemon juice and one of vegetable jelly, sweeten to taste, fill the crust shells and let set.

Prune Pie No. 1. Soak dried prunes over night, put on in cold water with a few slices of lemon, and cook for about three hours, when cool rub through a colander to remove the

pits. Stir it with an egg whip to mix it evenly with the liquid in which it was cooked; and to two and one-half cups of prune pulp thus made add four tablespoons lemon juice, one-third cup of honey or sugar, and one cup vegetable jelly; flavor with vanilla, mix well and fill the pie crust shells and let set.

Prune Pie No. 2. Drain the cooked prunes well, rub them through a colander to remove the pits, leaving them as dry as possible, put into a granite pan and set in the oven to dry out partly, when the moisture is quite well evaporated, remove from the oven and add just a little lemon juice and vanilla to flavor; fill the previously baked shells with the prune pulp. Beat the white of an egg stiff, flavor with a few drops of lemon juice, spread over the prune and brown slightly in a quick oven.

Banana Tapioca Pudding. $\frac{1}{2}$ cup tapioca, 1 cup boiling water, 3 tablespoons sugar, 2 thin slices lemon, vanilla flavor, 3 well ripened bananas.

Soak the tapioca for one hour or more, drain off the water, if any, put into a double boiler, pour over it one cup of boiling water, and let it steam until transparent. Have the bananas sliced quite thin, add the sugar and vanilla and let stand one-half hour; when the tapioca is cold add the bananas, mix well but avoid breaking them up too much; serve with cream.

Cream Tapioca. 2 cups milk, $\frac{1}{2}$ cup tapioca, 3 tablespoons sugar, 1 egg, vanilla flavor.

Wash the tapioca, drain and let stand a half hour. Heat the milk in the double boiler, and when hot stir in the tapioca; let steam until clear, stirring it now and then, as it takes a considerable time. When the tapioca is done, pour it slowly into the beaten egg, then return the mixture to the double boiler and cook until the egg begins to thicken, stirring constantly. Pour into a dish and let cool.

Cream Rice Pudding. 1 pint of rich milk, $\frac{1}{4}$ cup uncooked rice, $\frac{1}{2}$ cup seeded raisins, a sprinkling of grated lemon rind, vanilla flavor, 1 tablespoon sugar.

Wash the rice and put it into a granite baking pan; add the milk, lemon rind, and a pinch of salt, set on the top of the stove to cook; when the rice is about half done add the raisins and sugar, and set in a medium oven, cover and bake until it begins to thicken slightly, remove from the oven and let cool. This pudding should be soft and creamy and will dish up nicely if brought out of the oven at just the right time.

Grape Blanc Mange. 1 cup grape juice, $1\frac{1}{2}$ cups water, $\frac{1}{3}$ cup sugar, 5 tablespoons cornstarch.

Put the water, grape juice, and sugar into the inner part of a double boiler and set on the stove. When it comes to a good boil stir in the cornstarch, the latter having been dissolved in a little cold water. When it boils up, set into the outer part of boiler and let steam ten minutes, then pour into wetted molds. When cool turn out on a dish and serve with cream.

Layer Cake No. 1. 4 eggs, $\frac{1}{2}$ cup sugar, $1\frac{1}{3}$ cups flour, 2 tablespoons water, 1 tablespoon oil, vanilla flavoring.

Put the eggs, water and sugar into a round-bottom bowl, set on the edge of the stove where it is not too hot, and beat continuously with a wire batter whip until the mixture will pile nicely in the bowl when it runs from the whip. Then set it on the table, add the oil and flavoring, then half of the flour. Fold it in with a large spoon, then add the remaining flour and fold in lightly yet thoroughly. Pour into two oiled cake-tins and bake in medium oven about twelve to fifteen minutes.

Layer Cake No. 2. $1\frac{1}{4}$ cups pastry flour, 4 tablespoons corn starch, 1 scant cup sugar, 3 tablespoons water, 1 tablespoon vegetable oil, $\frac{1}{2}$ teaspoon lemon, 4 eggs separately, vanilla flavor.

Measure the flour and starch and sift them together through a flour sifter to mix them thoroughly. Add the water and oil to the sugar, mix well with a spoon so the sugar becomes well dissolved, and set it on the stove to heat while the eggs

are being beaten. The sugar, water, and oil should be allowed to boil up well, so that the oil will be completely emulsified and does no longer float on the top; it should not be allowed to stand and boil too long, for then it will cook down to a thick syrup. As soon as the oil is emulsified set it to one side to keep hot till the eggs are ready. Beat the yolks with a Dover beater till light and lemon colored, add the lemon juice and vanilla flavor, and set aside. Beat the whites stiff and dry, then fold the yolks into the whites; when well blended pour slowly the hot syrup into the eggs, folding it in with a wire batter whip or a large spoon, which causes the eggs to rise and get light. Care should be taken not to pour in the hot liquid so fast as to cook the eggs. Lastly, sprinkle over about half the flour, and fold it in with a large spoon, then add the remaining flour and fold it in likewise until all is well blended, but avoid stirring it, for that would break down the lightness of the batter; pour it into two oiled cake tins, and bake in a medium slow oven for fifteen to twenty minutes.

Walnut Loaf Cake. 2 eggs, $\frac{2}{3}$ cup pastry flour, $\frac{1}{2}$ teaspoon lemon juice, $1\frac{1}{2}$ tablespoons water, $\frac{1}{4}$ cup chopped walnut meats, $\frac{1}{2}$ scant cup sugar, vanilla flavor.

Have the flour measured and sifted, separate the eggs, beat the yolks with Dover egg-beater until light and lemon colored; add the water, lemon, vanilla, and sugar, and stir only enough to mix well, add about one-fourth of the flour and mix evenly, not stirring very much, only enough to make a smooth batter. Add a dash of salt to the whites and beat them stiff and dry. Pour the batter slowly into the whites, folding it in by running a batter whip or large spoon down the side of the bowl through the center and lifting it straight up and allowing the mixture to drop back into the bowl; repeat until all is well blended, but do not stir. Add the remaining flour and the chopped walnut meats and fold it in evenly with a spoon, turn out into an oiled bread tin and bake in a medium slow oven about twenty-five to thirty-five minutes. The damper of the stove should be closed up to keep

a slow steady heat for any loaf cake which requires such a long time to bake. This may be frosted over with a white frosting and sprinkled with chopped nuts, if desired.

White Icing No. 1. 1 cup sugar, $\frac{1}{3}$ cup water, 1 teaspoon lemon juice, white of 1 egg.

Dissolve the sugar in the water and let it boil until it threads, have the white of the egg beaten quite stiff, add the lemon juice, and pour in gradually the hot syrup, stirring the meanwhile; add the vanilla, a few drops, and continue beating until the mixture is light and creamy, then it is ready to use.

It would be well for the inexperienced in boiling this syrup to take a bowl of cold water, and while the sugar is boiling drop a teaspoon into cold water, and when it stays together and can be handled, then test the syrup by lifting the spoon from it and let the syrup run off until it threads. It should never be allowed to cook so long that it will harden when put into cold water.

White Icing No. 2. 1 cup powdered sugar, 1 teaspoon lemon juice, white 1 egg, a few drops vanilla flavor.

Beat the white of the egg, add the sugar, lemon juice, and flavor, and beat until creamy.

Icing No. 3. A simple icing can be made by adding powdered sugar to orange juice to the consistency to spread on cake, cover the same as when using boiled icing. Many prefer this icing to that made with white of egg, as it will not dry out nearly so quick as the boiled icing.

Orange Filling. $\frac{1}{4}$ cup boiling water, juice of four oranges, grated rind of 1 orange, $\frac{1}{3}$ cup sugar, $\frac{1}{4}$ cup flour.

Bring liquids and rind to the boiling point, braid the flour smooth with cold water and stir into the liquid; let it cook a few minutes and let cool.

If desired, the yolk of one egg may be added and stirred over the fire until it thickens, then set immediately off the fire to cool.

Toasts and Breakfast Dishes

Toasts are especially nice for breakfast. They are a light food, yet appetizing and nourishing.

Strawberry Toast. Bring fresh strawberries to boiling point with enough sugar to sweeten, using very little water. When done dip a piece of zwieback into juice to soften a little, lay the toast on a platter and cover well with strawberries, pour a spoonful of juice over all and serve. The juice may be thickened a little with cornstarch, if desired, before dishing up.

Blackberry Toast. Cook the berries until just done, add a little sugar, mash them through a fine strainer to remove the seeds. Dip a piece of zwieback into the liquid to soften, then thicken the berry pulp with a little cornstarch braided smooth in cold water. Let it cook slowly for a few minutes, and dish up as for strawberry toast.

Prune Toast Rub well cooked prunes through fine colander, add enough of the prune juice to make it of the consistency to spread on toast and not run off; reheat and dip a slice of zwieback in hot milk or prune juice to soften, lay on a platter and cover with the prune pulp.

Cream of Peas on Toast. $\frac{3}{4}$ cup green pea pulp, $\frac{1}{2}$ cup thin cream, salt to taste.

Bring peas to boil, drain off liquor; mash the peas through colander, having them separate from the liquid in which they were heated, add the hot cream and salt to taste. Reheat; dip a piece of zwieback in milk to soften, lay on a platter and cover with cream peas which should be thick enough not to run off.

Walnut Lentils on Toast. $\frac{3}{4}$ cup lentil puree, $\frac{1}{2}$ cup or more thin cream, $\frac{1}{4}$ cup finely chopped walnuts, salt to taste.

Cook lentils well done, drain and mash them through colander, moisten with the hot cream, salt to taste, add walnuts; reheat and dish up as cream peas on toast.

Tomato Toast. Dip a slice of zwieback into hot milk or tomato juice, lay on a platter and cover with a spoonful of tomato sauce.

Scrambled Eggs with Tomato. Scald and peel two medium sized ripe tomatoes, cut them into quarters, put them in a small covered sauce pan, add a little salt and boil a few minutes, turn them into a colander and drain off the juice. Put a tablespoon of cream into a small pan, or have the pan oiled; when hot, break in two eggs, stir them quickly so they may cook evenly; when they are soft cooked add the tomatoes, mix lightly and serve immediately.

Invalid Dietary

While the greater part of this work has been devoted to the contriving of meals usual in the average household and under ordinary circumstances, yet we must know how to supply the needs of the weak or suffering. A few recipes will be given under this head, for a few liquid foods may often be used where the more solid foods can not be retained or assimilated.

Food for the sick should be such as will furnish the most nourishment with the least tax upon the digestive organs. While it should generally be of a simple nature, it should be cooked with the greatest care, and served in the most inviting manner.

The temperature of the food will also have a marked influence on digestion, therefore it should be a rule to have hot foods served hot, and cold foods served cold.

The tray should be covered with spotless linen, should be carefully laid, and should not have the appearance of being overcrowded.

The breakfast tray especially should be made as attractive as possible. A few bright flowers will make it look cheery and inviting. While many of the foregoing recipes may be used for the sick,—as toasts, fruits, breads, soups, etc., the following will come under a special head, as liquid foods.

Barley Water. 2 tablespoons barley, 1 quart cold water.

Wash the barley and let it soak for an hour in a quart of cold water. Set on the stove and let boil until it is reduced to one cup of liquid; serve plain or season with a little cream, if desired.

Rice Water. 2 tablespoons rice, 2 cups cold water, a few grains salt, cream or milk, if desired.

Wash the rice and put into the cold water, heat gradually to the boiling point, and let it continue to cook until the rice is soft. Strain, reheat the rice water, add a little milk or cream, if desired.

Oatmeal Gruel. 3 tablespoons oatmeal, 2 cups boiling water, a few grains of salt.

Stir the oatmeal into the boiling water, and let it boil until it begins to thicken slightly, then set into a double boiler and let it cook two hours or more. Strain through a fine strainer and dilute it with a little hot water if it is too thick. Reheat and season with cream, if desirable. A gruel should be so thin that it will pour easily from a spoon.

Cornmeal Gruel. 3 tablespoons cornmeal, 2 cups water, a few grains of salt.

Prepare the same as oatmeal gruel.

Gluten Gruel. 4 tablespoons gluten meal, 1 cup of boiling water, a few grains of salt.

Sift the gluten slowly into the boiling water, stirring constantly to avoid having it form into lumps. Let it boil until the desired thickness is obtained. A little cream may be added before serving, if practicable.

Flax Seed Tea. 2 tablespoons flax seed, 2 cups boiling water, 2 tablespoons lemon juice.

Wash the flax seed in cold water, drain well, add the boiling water and let boil slowly for one hour. Strain, add the lemon and a very little sugar, if desired, and serve.

Fruit Egg Nogg. One egg separately, one-third cup fruit juice. The amount of sugar needed will vary according to

the acidity of the fruit. Orange egg nogg will require about one tablespoon sugar. Other juices, as grape, berry, or prune will require very little sugar, if any. A teaspoon of lemon juice should be added to the latter juices. Beat the whites stiff with a Dover egg beater, and take out one tablespoon of the whites to be kept for a garniture for the top of the glass. Beat the yolks and stir in the fruit juice and sugar. Mix well, then stir all into the beaten whites, and pour into a glass and serve with the tablespoon of beaten white on top.

Cream Egg Nog. $\frac{2}{3}$ cup thin cream, 1 egg, 4 or 5 drops of vanilla.

Beat the egg separately, add the cream and vanilla to the yolks, then pour the mixture into the beaten whites, mix well and serve in glass with a spoonful of beaten white on top.

Lemonade. 1 lemon, 2 tablespoons sugar, $\frac{3}{4}$ cup water.

Cut the lemon into halves, cut off a thin slice to be served in the glass, press out the juice, add sugar and water, mix well, serve in glass with half slice of lemon floating on top.

Orangeade. 1 orange, 2 tablespoons sugar, $\frac{1}{2}$ cup water.

Make same as for lemonade, except omit the garniture of the sliced orange in the glass.

It is a very common error to serve the sick with fresh made toast of bread which has been quickly browned on both sides and served hot. This makes the bread practically as indigestible as fresh baked bread. Zwieback may be heated, served dry or moistened with hot milk or water, and being thoroughly dextrinized, it is very easily digested and assimilated.

Eggs, when cooked and served to the sick, should as a rule always be soft cooked, poached, or soft boiled, curdled or scrambled with a little milk.

While it does not prove to be the best policy to prescribe the exact amount of calories of the different elements of

nutrition for individuals, yet one should have a practical knowledge of the requirements of the human body, and should supply food that is relishable and strengthening. By lowering the vitality, whether through one extreme or the other, the way is open for disease to enter the body. We should therefore aim to supply good, simple, wholesome, nourishing food, that will fortify the body against the attacks of disease.

Fruit Ices and Creams

Fruit ices when eaten at proper times may be used by most people, and in hot weather they are cooling and refreshing. The mixture of large quantities of milk and sugar, used in the manufacture of ice creams, makes a bad combination. Large quantities of milk and sugar taken together create poisons in the system. Fruit ices and ice cream are often recommended by physicians for particular cases. The following suggestions on the use of ices and ice creams by a physician of long practical experience will be a help to the nurse or mother.

“**Fruit Ice** is a very useful article of food for those who are suffering with a gastritis where there is an absence of hydrochloric acid. It has the effect of reducing the inflammatory condition and at the same time supplies the patient with nutrition. It is not a good plan to take fruit ice in connection with a large meal, as it lowers the temperature of the stomach, and the latter can not perform its functions until it has reached its normal temperature again.

“**Ice Cream** is a useful article of food for a person who is suffering with gastric ulcer and inflammation of the stomach, due to excess of hydrochloric acid, as it is both nutritious and cooling to the stomach.

“The combination of sugar and milk does not seem to do any particular damage under these conditions, for the large amount of hydrochloric acid seems to neutralize any evil effects. It

is not a useful article of food for an individual with a normal stomach. The materials used should be of the best quality, for frequently we have severe ptomain poisoning from eating an inferior quality of ice cream."

Strawberry Ice. 2 cups strawberries, $\frac{1}{3}$ cup sugar or more, $\frac{1}{2}$ cup water, 1 tablespoon lemon juice.

Wash and remove the stems from well colored ripe berries. Put them into a bowl, sprinkle over the sugar, cover and let stand one hour, then mash them well, add the water and press through a fine strainer or cheese cloth to express as much juice as possible, add the lemon juice and freeze, using about one part salt to three or four parts ice. Too much salt will make a coarse grained ice. The beaten white of an egg may be added, if desired.

Blackberry or Raspberry Ice is made the same as strawberry ice, using blackberries and raspberries instead of strawberries.

Apricot Ice. 1 cup stewed apricot pulp, 2 tablespoons lemon juice, $\frac{1}{4}$ cup water, sweeten to taste.

Stew the apricots with enough sugar to sweeten, when cool mash them through a fine colander, add lemon juice and water and freeze. A little more sugar may be required; the amount needed will depend somewhat on the acidity of the fruit.

Pineapple Ice. 1 cup canned grated pineapple, $\frac{2}{3}$ cup water, 3 tablespoons lemon juice, 1 tablespoon sugar.

Add cold water and sugar to the pineapple and let it stand half an hour, then add the lemon juice and water and freeze. Or the juice may be pressed out through a strainer before freezing it, if desired.

Grape Fruit Ice. $\frac{2}{3}$ cup grape fruit juice, $\frac{1}{2}$ cup boiling water, $\frac{1}{3}$ cup sugar or more.

Add the sugar to the boiling water and bring to a good boil; when cool, add the grape juice and freeze.

Lemon Ice. $\frac{1}{4}$ cup lemon juice, $\frac{2}{3}$ cup boiling water, $\frac{1}{3}$ cup sugar or more.

Make the same as grape fruit ice.

Ice Cream. $\frac{1}{2}$ cup milk, $\frac{1}{2}$ cup rich cream, 6 drops vanilla or more, 1 tablespoon sugar.

Put the milk into the freezer, and when it has become about half frozen add the cream (whipped quite thick), sugar, and vanilla; mix well and freeze. By having the cream previously whipped and adding it as above, the ice cream will have a more velvety appearance than it would by mixing it all at once.

Canning, Preserving, Etc.

The great secret of canning lies in complete sterilization. All fruits and vegetables, as well as the water we drink and the air we breathe, are teeming with minute forms of life called bacteria or molds or germs. These germs are the sole cause of decomposition or rotting, and are the only causes of spoilage we have to deal with in canning.

The exclusion of air from canned articles is not necessary provided the air is sterile and free from germs.

Fruits

Fruits are usually slightly acid, and in general do not support bacterial growth, but are more commonly fermented by yeasts. In order to retain the natural flavor of the fruit little sugar should be used, and the fruit should be cooked only long enough to insure its preservation. It is unnecessary to boil the syrup previously. The sugar may be dissolved in cold water in right proportion to the kind of fruit used, and poured over the fruit in the jars. The fruit should be perfectly sound and not over ripe. It should always be sorted; ripe fruit and hard fruit should never be cooked in the same jar. All stewpans, strainers, glass jars, and tops should be put on in cold water, heated to the boiling point, and then boil for ten minutes before using. The quantity of sugar used

will vary with the kind of fruit used, and somewhat with the locality in which it is grown. The following proportion is taken as an average, more or less sugar may be used as the case may require:—

SYRUPS,—

Apricots,	2½	quarts	water	to	1	quart	sugar
Peaches,	3	“	“	“	1	“	“
Pears,	3 to 4	“	“	“	1	“	“
Plums, sour	1½	“	“	“	1	“	“

Berries may be canned by this method, using about two pounds of sugar to ten pounds of berries, add the sugar to the stemmed and washed berries, let stand one hour, fill jars and cook the same as for ripe apricots. Most people prefer to bring the berries to boil on top of the stove with sugar needed, and fill them into hot glass jars and seal them.

Apricots. Preferably canned whole. Wash and pack into glass jars, put on the rubber ring, and fill with syrup. Screw the covers on loosely, and set the jars into a boiler with a false bottom in it to keep the jars from resting on the bottom of the kettle. Pour cold water into the boiler until the jars are about two thirds immersed in water. Heat gradually to the boiling point, and let boil for ten minutes *after boiling begins*. Then remove the cover from one jar and stick the point of a knife into the fruit, if it is quite tender, set the jar into a shallow pan of hot water and run the blade of a silver knife down the side of the fruit to let the foam rise to the top; fill to overflowing with boiling syrup and screw the top on tightly. Turn up side down on the table to make sure there is no leak. Let it remain thus until next day, then wipe the jar with a damp cloth and set the fruit in a cool, dark place.

Peaches. Use free-stone peaches. Peel and cut them in halves, removing the stones, except that a few may be put into each jar for flavor. Pack the fruit into jars, and finish the same as for apricots.

Pears. Peel and cut the fruit into halves. Remove the

seeds, etc., and proceed in the same way as for peaches.

Plums. Wash and peel the plums, saving out the small ones and the peel for jelly. Pack the fruit into jars and finish the same as apricots.

Jelly. To each fifteen pounds plums and peel, add about two quarts cold water, and set on the stove, care being taken not to burn them. When they are thoroughly done, pour into a bag or cloth in which the mesh is not woven too closely together, and hang up to drip. To each quart of juice thus made add one quart of sugar and bring to boil; skim, and let it continue to boil for thirty minutes, if only one quart of juice; forty minutes, if one gallon; and about fifty minutes to one hour for five to ten gallons. Take glasses out of hot water and fill, let them stand forty-eight hours, then pour over them enough hot parafine to cover.

If plums are picked just after a rain or heavy dew, they will contain much more water than otherwise, then they will require less water, and it is always safest to boil a small quantity first as a test before making a large quantity of jelly.

Vegetables

The spoiling of vegetables is due primarily to bacteria. Being much more resistant to heat than yeasts, they require longer cooking than fruits. While the parent bacteria may be destroyed by a temperature of boiling water, the seeds or spores retain their vitality at that temperature for a long time, and upon cooling will germinate and begin their destructive work. Therefore it is found necessary, in order to completely sterilize a vegetable, to heat it to the boiling point and *keep it to that temperature for one hour, for two or three successive days.*

String Beans. Break the ends off, remove strings, wash, drain, and pack them into cans provided for that purpose. Make a solution of one ounce salt to two and one-half quarts water, and pour it on the beans, filling the cans four-fifths full. Solder tightly, and when they have boiled one hour,

puncture the end to let out the steam, then in five minutes resolder and let remain until next day, when they should be boiled one hour more, and on the third day repeat the boiling. They may then be stored. They need not be punctured except after the first cooking.

Corn. Secure young corn. Scour down the rows and press out the pulpy material; add enough salted water to make it quite soft, using a preparation of one ounce salt to one and one-half quarts water, and finish the same as string beans. A very little sugar should be added to the corn, also to green peas, which are canned by the same method.

Combinations and Menu-Making

The art of planning and combining is one of no small importance to the housewife or cook. The very best foods may be combined or served in such combinations as to bring distress to the digestive organs, and produce weakness instead of strength.

Because human beings differ so much and their needs are so varied, it is impossible to lay down any set of rules on diet for all alike. But there are general principles by which everyone may be guided in matters of diet, and which, if heeded, can accomplish more for the individual or family, in maintaining a healthy condition of the body, than all the doctor's prescriptions.

It is therefore important for those who have to plan for the family to have a working knowledge of the principles which guide and direct in making out a balanced menu. In the first place there should not be a great variety at any one meal. Several articles of food at the same meal work up fermentation, and the food does not nourish the system.

While perhaps all can not eat the same foods (and it might be well always to plan so there can be some individual choice in the matter of foods to be eaten), yet a very common error, and one that is so often committed with none but the best intentions, is that of loading the table down with every

possible variety of food. True, the same dishes prepared in the same way should not appear on the table meal after meal, and day after day. The food should be varied, and the cook should plan to have different foods served in different ways so as to have the table always looking fresh and inviting.

A great variety at one meal encourages overeating, bringing distress and feebleness in its train. Overtaxation of the digestive organs is a bad form of dissipation, and is said to be the cause of more disease, whether directly or indirectly, than is caused by all alcoholic dissipation combined, the latter very often being due to the former.

There is no little truth in the statement made by an English surgeon, Dr. Abernethy, that, "One-fourth of what we eat keeps us; the other three-fourths we keep at the peril of our lives." While this statement may seem to some to be somewhat exaggerated, yet it is a well known fact that most of us eat more than we really need for the proper sustenance of the body; and when carried to the extreme, the energies of the body are dissipated in ridding the system of a dead weight of surplus material. While the cook can not be held responsible for the course of individuals in these matters, yet it is within his power not only to plan the meal in such a manner as to encourage right habits and thus alleviate suffering, but, being guided by sound principles, can make the work educational in character. Soft foods, several articles of food at the same meal, and hasty eating or bolting of food, all lead to overeating.

Then again it is not well to eat fruit and vegetables at the same meal. Fresh fruits are very easily digested in the stomach, a sweet apple being digested in the stomach in from one hour to one hour and a half, while many of the coarser foods require from three to four hours or more for their digestion in the stomach. When these are taken together, the fruits, mixed with other foods, are kept in the stomach for such a long period of time that they ferment, and the

formation of vinegar or alcohol is the result. Acid fruits and coarse vegetables, as roots and tubers, are an especially bad combination. Many people, who think a certain food does not agree with them, often learn that the trouble is not with the food, but with the combination in which they have been taken. The finer vegetables, known as the fruity vegetables, as squash, tomatoes, peas, corn, etc., can be used by most people where a fruit dessert or fresh fruit is served, and these principles should be taken into consideration in all our planning.

Grains, fruits, and nuts are a good combination; also grains, or cereals, vegetables, and nuts. It might be well to say that while grains and fruits are a good combination, it should be remembered that to pour acid fruits over rice, bread, or any starchy food to soften it, not only hinders the flow of saliva, but the acid of the fruit so neutralizes the saliva as to hinder the digestion of the food in the stomach. If starchy foods be thoroughly masticated first, and the fruit eaten afterwards, then the food will be in a condition to be easily acted upon by the digestive juices. The free use of milk and sugar taken together works untold harm and should be avoided. Milk and acid fruits are a bad combination, and should not be taken together.

Then there should be a simplicity about the preparation of food; a nicety that should appeal to the finer instincts of people. Complex mixtures and highly seasoned foods ought to be an insult to a healthy, normal stomach.

Nature has provided an abundance of natural flavors in the different foods which do not irritate the delicate organs of digestion, but which have a pleasing effect. Food should be prepared and served in an appetizing manner, and should appeal to the sense of sight as well as to that of taste. The sight and smell of pleasing food starts the flow of the digestive fluids, while disagreeable odors and sights hinder it.

Many people make themselves sick by thinking continuously about what they eat, and fearing lest it may not agree with them. The secret of good digestion is thorough mastication; this is the part over which we have control. This settled, together with the proper combination and preparation of food, we are to choose those things that experience and sound judgment tell us are the best suited to our individual cases, and eat them with joy and a thankful heart, and then forget all about the rest. Nature will do her part faithfully if left unencumbered.

In making out a well balanced menu, there is need to con-

sider not only the properties of the food but its adaption to the eater. Food can be eaten freely by persons engaged in physical labor which must be avoided by those whose work is chiefly mental. Then again, we should always plan so that, as far as combination is concerned, we shall set before people foods that combine well together. Suppose, for instance, we should have vegetable soup first; most people will no doubt partake of it when it is set before them. Then we have already started them on a vegetable dinner; now, should we have a fruit salad or fruit dessert, with perhaps other coarse vegetables, it is very apparent there is a lack of judgment on the part of the one responsible. Such mistakes can be avoided without inconvenience when making out the plans, by putting a cream of peas, or tomato, or other like soup, instead of the vegetable, whenever fruit is taken into the combination. While it is true that people need not partake of everything before them, yet there are some things most people will use, and these things should always be taken into consideration while making out the plans. We should always plan so that **the soup, the relishes, and the dessert**, if any, shall harmonize as far as combination is concerned; and if fruit, as fruit salad or fruit dessert, is used, there should be at least one of the finer vegetables, as tomatoes, squash, corn, etc., to choose from; and at another time, when fruit is omitted from the menu, we may plan a good vegetable dinner, in which any of the coarser vegetables may be combined with some dish in the form of grains, legumes, or nut food.

In seeking to supply foods that will give proper nourishment to the body, we should avoid the extremes in both directions; on the one hand that which tends toward an impoverished diet, and on the other hand that which brings into one meal too many heavy, highly concentrated foods. Fresh vegetables, especially the coarse vegetables, contain a large proportion of water in their composition. These vegetables of themselves would fail of supplying proper nutrition to the body. But when served with the more solid foods, as grains, legumes, nuts, or nut foods, they furnish bulk to the food, and are rich in mineral matter. Perhaps one of the more solid foods, rich in nutritive value, together with other vegetables prepared in a simple manner, would give variety and ample choice for most people.

The following suggestive menus will help to illustrate the working out of some of these principles.

Suggestive Menu

BREAKFAST

STRAWBERRIES

STEWED PRUNES

WHOLEWHEAT PUFFS

BROWNED RICE

CORN FLAKES

WALNUT LENTILS ON TOAST

CREAM

HONEY

CEREAL COFFEE

DINNER

CREAM OF GREEN PEAS

OLIVES

SLICED TOMATO

RICE AND MACARONI CROQUETTES

BAKED POTATO

SUMMER SQUASH

WHOLEWHEAT BREAD

CONCORD GRAPES

APPLE PIE

LUNCHEON

APPLES

RED RASPBERRIES

FRESH FIGS

CREAM TOAST

TOASTED GRANOSE BUSCUIT

WHOLEWHEAT STICKS

CRACKERS

NECTAR

CEREAL COFFEE

Suggestive Menu

BREAKFAST

SLICED BANANAS

CANTALOUPE

POACHED EGG

BAKED POTATO

CORN BREAD

TOASTED RICE BUSCUIT

CREAM

OLIVE OIL

MELTLOSE

CEREAL COFFEE

DINNER

LETTUCE AND EGG

CELERY HEARTS

STUFFED DATE SALAD

NEW ENGLAND STEW

MASHED POTATO

BAKED EAR CORN

FRUIT BREAD

MIXED NUTS

PRUNE PUDDING WITH CREAM

WATERMELON

LUNCHEON

PEACHES

STEAMED FIGS

APPLE SAUCE

RICE GRUEL

PUFFED WHEAT BERRIES

FRUIT CRISPS

CREAM

HONEY

YOGURT

CEREAL COFFEE

